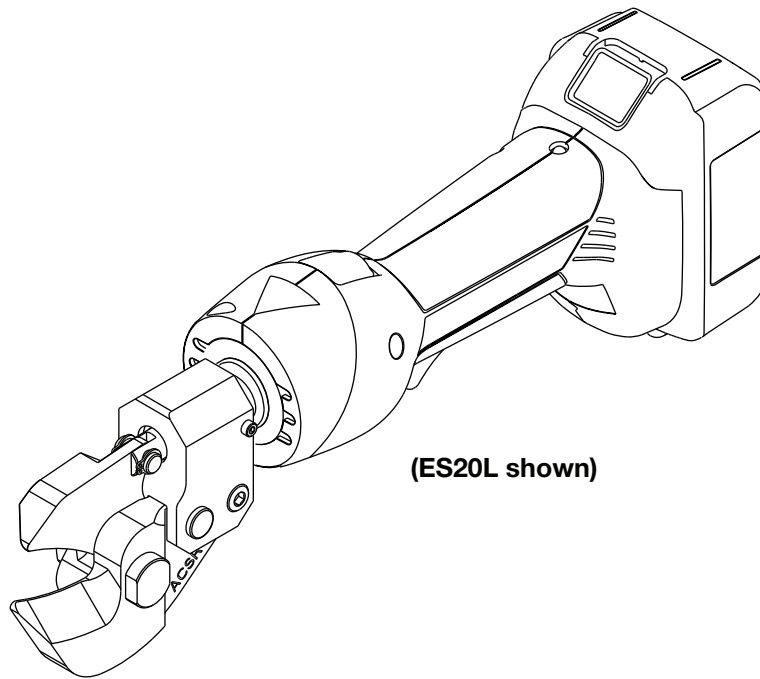


OPERATION MANUAL



Serialnummer



GATOR® **Battery-powered** **In-line 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

Table of Contents

Description	2
Safety	2
Purpose of this Manual	2
Important Safety Information	3-4
Identification	5
Specifications	6-7
Operation	8-10
Maintenance	11
Troubleshooting	12

Description

Greenlee's Battery-powered In-line Cutters are hand-held, self-contained cutting tools intended to cut the following:

- **ES20L ACSR Cutter:** Copper and aluminum cable up to 3/4" (19 mm), 336 ACSR, 3/8" reinforcement bar (rebar), and 3/8" stranded guy wire. It is not intended for use on EHS guy wire.
- **ES32L Cable Cutter:** Aluminum and copper cable only.
- **ES32FL Cable Cutter:** Fine stranded cable only.
- **ETS8L Cable Tray Cutter:** Wire, basket-style cable trays up to 0.31" (8.0 mm) diameter.
- **ETS12L Single Use Lock Cutter and Bolt Cutter:** Bolts, steel rods, one-time disposable locks, and sea container seals or similar soft metal devices.
- **ESG25L Cable Cutter:** Copper and aluminum cable up to 1" (25 mm), 636 ACSR, 3/8" reinforcement bar (rebar), 5/8" stranded guy wire and 1/2" wire rope. It is not intended for use on EHS guy wire.

These tools are protected by U.S. Patent No. 6,276,186, 6,401,515, 6,718,870, 7,086,979, and 7,254,982.

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:

- ES20L Battery-powered ACSR Cutter
- ES32L Battery-powered Cable Cutter
- ES32FL Battery-powered Cable Cutter
- ETS8L Battery-powered Cable Tray Cutter
- ETS12L Battery-powered Single Use Lock Cutter and Bolt Cutter
- ESG25L Battery-powered Cable Cutter

Keep this manual available to all personnel.

Replacement manuals are available upon request at no charge at www.greenlee.com.



Do not discard this product or throw away!

For recycling information, go to 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 Greenlee Textron 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**

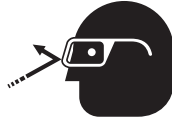
Immediate hazards which, if not avoided, **WILL** result in severe injury or death.


⚠ **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.


	<p style="text-align: center;">⚠ WARNING</p> <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>
--	---

	<p style="text-align: center;">⚠ WARNING</p> <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>
--	--

	<p style="text-align: center;">⚠ WARNING</p> <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>
--	---

	<p style="text-align: center;">⚠ WARNING</p> <p>Read and understand all of the instructions and safety information in this manual before operating or servicing this tool.</p> <p>Failure to observe this warning could result in severe injury or death.</p>
---	--

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

	<p style="text-align: center;">⚠ WARNING</p> <p>Electric shock hazard:</p> <p>This tool is not insulated. When using this unit near energized electrical lines, use proper personal protective equipment.</p> <p>Failure to observe this warning could result in severe injury or death.</p>
---	---

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

Inspect tool and blades before use. Replace any worn or damaged parts. A damaged or improperly assembled tool can break and strike nearby personnel.

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

⚠ CAUTION

- Do not operate the tool without cutting blades. Damage to the ram or cutting head can result.
- Do not twist work piece or tool during cutting operation. Blade failure could result.
- This tool is not designed for continuous use. After 100 cutting cycles, allow the cutting 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.

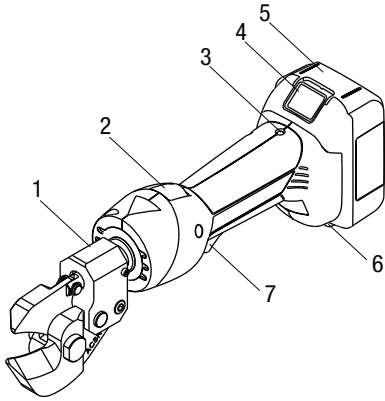
⚠ CAUTION

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

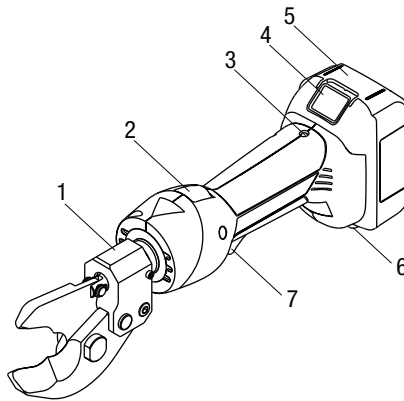
Failure to observe this precaution may result in injury and property damage.

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

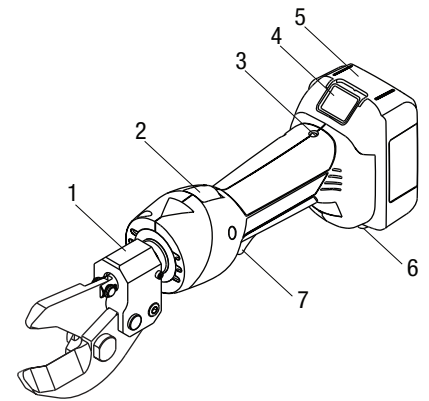
Identification



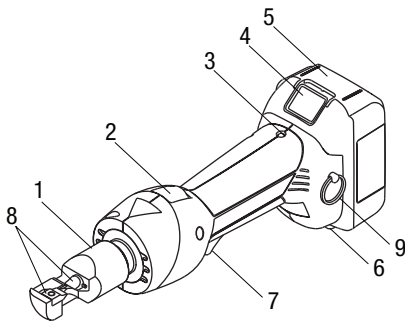
ES20L



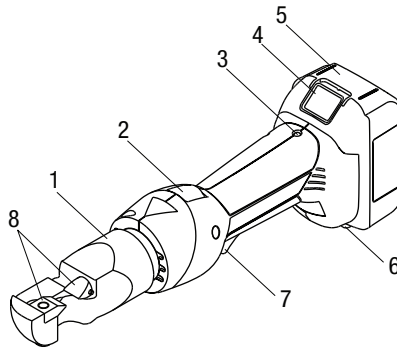
ES32L



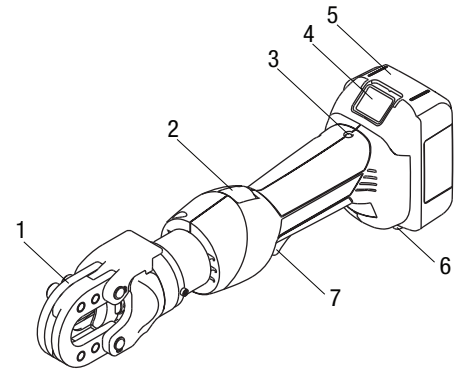
ES32FL



ETS8L



ETS12L



ESG25L

Battery-powered In-line Cutters

- | | |
|------------------------|--------------------------------------|
| 1. Cutting Head | 6. LED Work Light (white) |
| 2. Retract Button | 7. Trigger |
| 3. LED Indicator (red) | 8. Cutting blades (ETS8L and ETS12L) |
| 4. Battery Lock | 9. Lanyard Ring (ETS8L) |
| 5. Battery Cartridge | |

Specifications

ES20L

Cutting Tool	
Length (with battery).....	15.00" (381 mm)
Width	2.87" (72.9 mm)
Depth.....	4.50" (114.3 mm)
Weight.....	4.6 lb (2.1 kg)
Cutting Capacity	
Maximum Cable Cutting Diameter (copper and aluminum)	3/4" (19 mm)
ACSR.....	Merlin ø11/16 (336 kcmil)
Guy Strand (not EHS)	3/8" (9 mm) dia.
Ground Rod	3/8" (9 mm) dia.
Rebar (Schedule 60)	3/8" (9 mm) dia.

ES32L

Cutting Tool	
Length (with battery).....	15.00" (381 mm)
Width	2.87" (72.9 mm)
Depth.....	4.50" (114.3 mm)
Weight.....	4.4 lb (2.0 kg)
Cutting Capacity	
Maximum Cable Size with 2 Cutting Cycles	500 kcmil (MCM) (300 mm ²) (aluminum and copper)
Maximum Cable Size with 1 Cutting Cycle	400 kcmil (MCM) (240 mm ²) (aluminum and copper)

ES32FL

Cutting Tool	
Length (with battery).....	15.00" (381 mm)
Width	2.87" (72.9 mm)
Depth.....	4.50" (114.3 mm)
Weight.....	4.4 lb (2.0 kg)
Cutting Capacity	
Fine Stranded Copper Cable only	ø1.25" (31.8 mm) max.
<i>Not for cutting regular stranded cable or steel</i>	

ETS8L

Cutting Tool	
Length (with battery).....	12.00" (304.8 mm)
Width	2.87" (72.9 mm)
Depth.....	4.50" (114.3 mm)
Weight.....	3.4 lb (1.5 kg)
Cutting Capacity	
Cable Tray (mild steel, zinc plated).....	1/16", 1/8", 3/16", 1/4", 5/16"
Cable Tray (stainless steel)	1/16", 1/8", 3/16", 1/4"
Threaded Rods	1/16", 1/8", 3/16", 1/4", 5/16"
Grade 2 Bolt	1/16", 1/8", 3/16", 1/4", 5/16"
Grade 8 Bolt	1/16", 1/8", 3/16"

Specifications (cont'd)

ETS12L

Cutting Tool

Length (with battery).....	13.62" (345.9 mm)
Width	2.87" (72.9 mm)
Depth.....	4.50" (114.3 mm)
Weight.....	4.4 lb (2.0 kg)

Cutting Capacity

Common Bolt	1/2" dia.
Grade 5 Bolt	7/16" dia.
Grade 8 Bolt	5/16" dia.
Threaded Rod.....	1/2" dia.
One-Time Disposable Lock	4 AWG Alumoweld
Boa Lock	BL-9
Grade 40 Rebar	3/8" dia.
Steel Rod.....	3/8" dia. (1/2" dia. using two cycles)
Ground Rod.....	3/8" dia. (1/2" dia. using two cycles)
Copper and Aluminum Cable	2/0 AWG
ACSR.....	3/0 AWG Pigeon (4/0 AWG Penguin using two cuts)
Guy Strand	5/16" dia. (3/8" dia. using two cycles)
EHS Guy Strand	5/16" dia.
Aircraft Cable.....	1/4" dia.

Not recommended for fine stranded cables.

ESG25L

Cutting Tool

Length (with battery).....	15.00" (381 mm)
Width	2.87" (72.9 mm)
Depth.....	4.50" (114.3 mm)
Weight.....	4.6 lb (2.1 kg)

Cutting Capacity

Maximum Cable Cutting Diameter (copper and aluminum)	1" (25 mm)
ACSR.....	Grosbeak 1" (636 kcmil)
Guy Strand (not EHS)	5/8" (16 mm) dia.
Ground Rod	3/8" (9 mm) dia.
Rebar (Schedule 60)	3/8" (9 mm) dia.
Wire Rope.....	1/2" (13 mm) dia.

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

52047087	120 VAC corded adapter	52054992	Li (18 V) to NiCd, NiMH (12 V) charger adapter
52047088	230 VAC corded adapter	52049201	120 VAC, 18 V charger
52049190	18 V, 1.5 Ah lithium-ion battery	52049202	230 VAC, 18 V charger
52049189	18 V, 3.0 Ah lithium-ion battery	52049204	12 VDC, 18 V charger

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.

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

⚠ WARNING

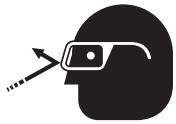


Electric shock hazard:

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



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.

⚠ CAUTION

- Do not operate the tool without cutting blades. Damage to the ram or cutting head can result.
- Do not twist work piece or tool during cutting operation. Blade failure could result.
- This tool is not designed for continuous use. After 100 cutting cycles, allow the cutting 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 not 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)

Important Features of All Models

- The hydraulic unit incorporates an automatic retraction, which returns the piston and movable blade to the starting position when the maximum cutting force is achieved.
- The unit is equipped with a special brake, which stops the forward motion of the piston when the trigger is released.
- The cutting heads have been designed to turn 350° around the longitudinal axis in order to gain the best access to tight corners and other difficult working areas.

Cutting Procedure— ES20L, ES32L, and ES32FL

1. Insert the cable to be cut into the cutting head.
2. Pull the trigger to make the cut.
3. Hold the trigger down until the cutting tool achieves pressure relief, which is accompanied by an audible “pop”.
4. The cutting tool returns automatically.

Note: If it is necessary to retract the ram before a cutting cycle is completed, push the retract button. Pushing the retract button will result in the complete retraction of the ram.

Note (ES32L only): For some cables more than one cutting cycle may be required to complete the cut. If the cable is not fully cut during the first cycle, move the cable as close to the jaw pivot as possible and cycle the tool again.

Cutting Procedure—ETS8L and ETS12L

1. Check cutting head to ensure the piston and movable blade are fully retracted. If necessary, pull the retract slide in the direction of the arrow.
2. After positioning the wire/bolt between the open cutting blades, actuate the trigger to start the cutting cycle.

Note: Do not twist work piece or tool during cutting operation. Blade failure could result.

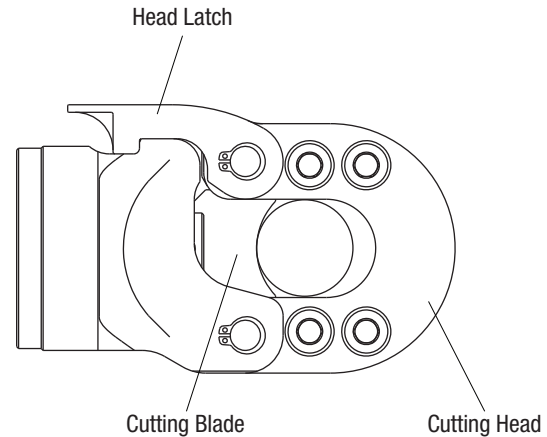
Note: The cutting process can be interrupted at any moment by releasing the trigger. By actuating the retract slide, the piston and movable blade will return to the starting position.

Operation (cont'd)

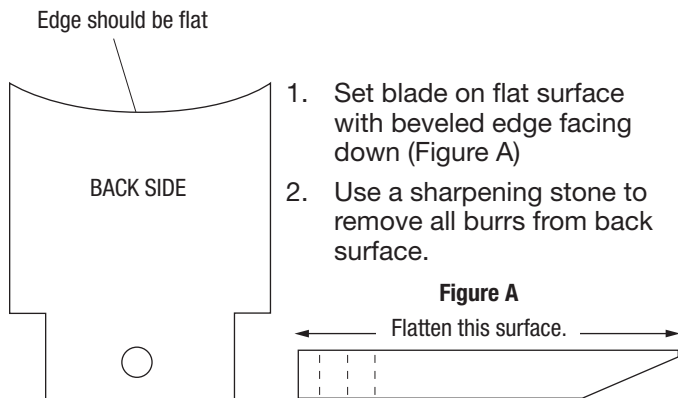
Cutting Procedure—ESG25L

1. Lift the head latch to open the cutter.
2. Place the material to be cut between the jaws.
3. Close the head latch completely.
4. Align the material at a 90° angle to the blades.
5. Pull the trigger to make the cut.
6. Hold the trigger down until the cutting tool achieves pressure relief, which is accompanied by an audible “pop”.
7. The cutting tool returns automatically.

Note: If it is necessary to retract the ram before a cutting cycle is completed, push the retract button. Pushing the retract button will result in the complete retraction of the ram.

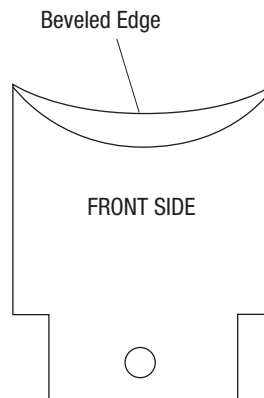


Sharpening the Blade—ESG25L



1. Set blade on flat surface with beveled edge facing down (Figure A)
2. Use a sharpening stone to remove all burrs from back surface.

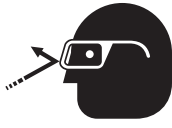
Figure A





3. Use a high-speed dremel-type tool to flatten top edge of blade (approximately 1/32" wide flat).


Do not leave a sharp edge. This will cause chipping of cutting surface and will decrease blade life.

Maintenance

	⚠ WARNING
	<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>

	⚠ WARNING
	<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>

	⚠ WARNING
	<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>

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

IMPORTANT
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. 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

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.

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 battery contacts damaged.	Reform contacts.
	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.