GREENLEE

PRENSATERMINALES A BATERIA S/B-C-MORD.

EK628LXB

UPC # 0783310609445

SKU: 3701120



- Tecnología inteligente: Comunicación Bluetooth™ con la app Greenlee Gator Eye y pantalla LED que muestra batería, presión y diagnósticos. Sensor de presión que alerta si el engarzado es insuficiente.
- Alto rendimiento: Batería de iones de litio de 18V con 70% más ciclos por carga y ciclos más rápidos. Luz LED que indica estado de carga y mantenimiento.
- Diseño ergonómico: Estilo en línea, liviano y fácil de controlar. Áreas de agarre moldeadas, cabezal giratorio 350°, y luz LED de trabajo para espacios oscuros.
- Operación eficiente: Un solo gatillo para todas las funciones. Retracción automática al finalizar el ciclo. Uso de aceite biodegradable.
- Compatibilidad y alimentación: Funciona con cargador o adaptador de 120V, 12V o 230V. Incluye mordazas CJ22 (para troqueles KC22 y KA22), y es compatible con mordazas opcionales CJD3 (troqueles KD6 y W) y CJK (troqueles Thomas & Betts 6t).

Especificaciones

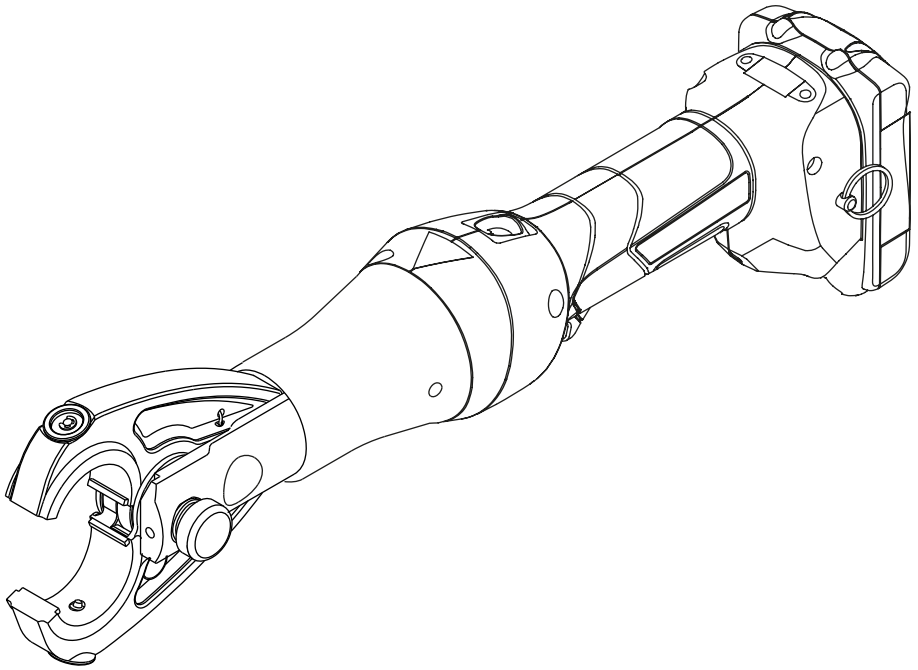
Marca secundaria	Gator
Tipo	Engarzadora estilo troquel
Aplicación	Engarzado de 6 t
Estándar	Certificación UL para Canadá y Estados Unidos
Tamaño del cable	Cobre, 8 AWG - 300 kcmil
Tamaño del cable	Aluminio, 8 AWG - 1250 kcmil
Longitud total	18,5 pulg (470 mm)
Fuerza de engarzado	12.000 lb (53 kN)
Capacidad de engarzado	Cobre de 600 kcmil (MCM)
Capacidad de engarzado	Aluminio de 350 kcmil (MCM)
Tipo de conector	Lengüetas y empalmes codificados por color
Tipo de manija	Estilo en línea con agarre de caucho sobremoldeado

*Greenlee® puede introducir mejoras y/o cambios en los datos técnicos de los productos en cualquier momento, a discreción propia y sin obligación o anuncio previo, y además se reserva el derecho a modificar o cancelar modelos.

OPERATION MANUAL

GREENLEE®

Serial Number



EK628LX
GATOR® Battery-powered Crimping Tools

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

52080012 REV3
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Description

The EK628LX Battery-powered Crimping Tool are hand-held, self-contained crimping tool with removable crimping jaws.

This tool has a Bluetooth® connectivity and an LCD screen.

The tool is protected by U.S. Patent No. 6,276,186, 6,401,515, 6,718,870, 7,086,979, 7,216,523, and 7,254,982.

Model X—FCC ID: RFRMS42; IC ID: 4957A-MS42

USA requirements:

Responsible party: Greenlee Tools, Inc.
Rockford, IL 61109 USA

Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

This device complies with the RF exposure SAR test exclusion requirements for portable devices, if a minimum separation distance is kept. However, the device shall be used in such a manner that the potential for human contact during normal operation is minimized.

Canada requirements:

This device complies with Industry Canada's license-exempt RSSs. Operation is subject to the following two conditions:

(1) This device may not cause interference; and

(2) This device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

1) l'appareil ne doit pas produire de brouillage;

2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

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 tool:

- EK628LX Battery-powered Crimping Tool

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 Tools, Inc. shall not be liable for damages resulting from misapplication or misuse of its products.

GATOR is a registered trademark of Greenlee Tools, Inc.

Bluetooth is a registered trademark of Bluetooth SIG, Inc.

Blackburn is a registered trademark of Thomas & Betts.

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

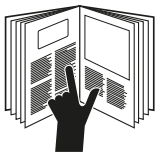
Immediate hazards which, if not avoided, WILL result in severe injury or death.

⚠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.

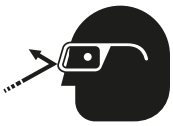


⚠WARNING

Electric shock hazard:

This tool is not insulated. When using this unit on or 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

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

An incomplete crimp can cause a fire.

- Use proper die, connector, and cable combinations. Improper combinations can result in an incomplete crimp.
- The relief valve sounds and the ram automatically retracts to indicate a completed crimp. If you do not hear the sound of the relieve valve or the ram does not automatically retract, the crimp is not complete.

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



⚠WARNING

Pinch points:

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

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 dies 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 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

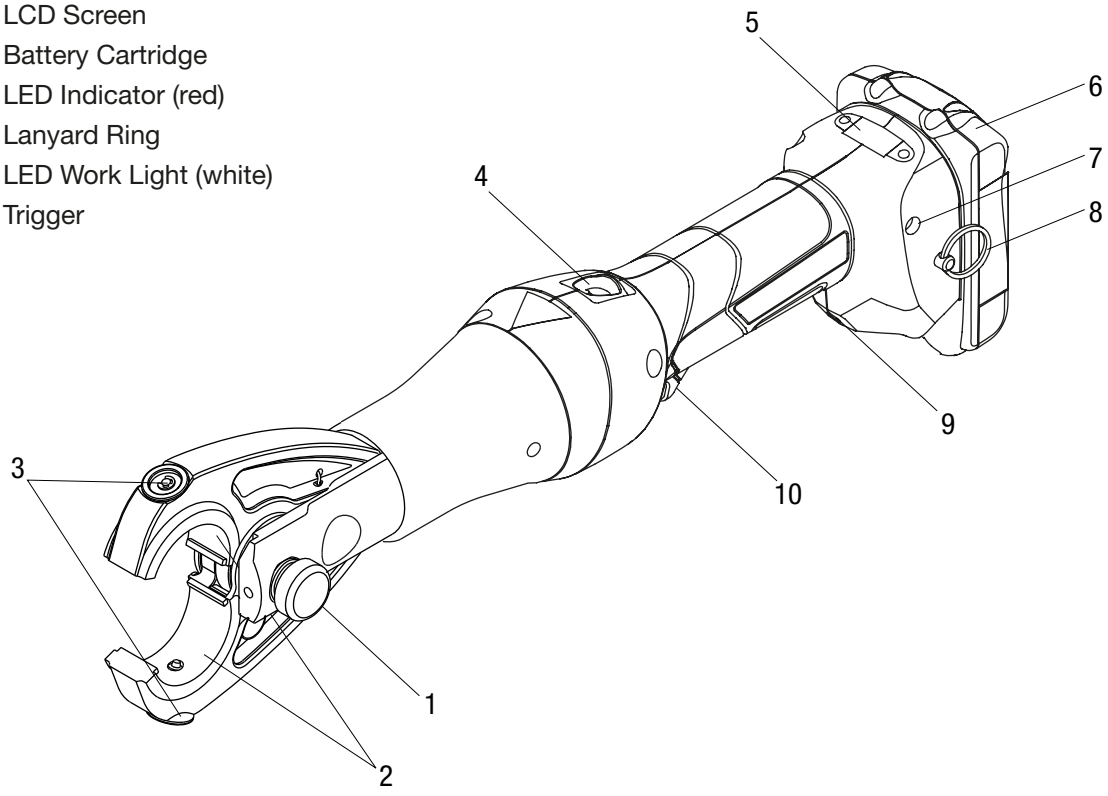
Do not perform any service or maintenance other than as described in this manual. Injury or damage to the tool may result.

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. Lock Pin
2. Crimping Jaws
3. Crimping Die Release
4. Retract Button
5. LCD Screen
6. Battery Cartridge
7. LED Indicator (red)
8. Lanyard Ring
9. LED Work Light (white)
10. Trigger



Specifications

Crimping Tool

Length	18" (456 mm)
Width	2.95" (75 mm)
Depth	4.92" (125 mm)
Weight	6.4 lb (2.9 kg)
Crimping Force	6 tons (53 kN)
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
Battery Technology	MAKITA® LXT® Lithium ion
	BL1815, BL1820, BL1830, BL1840, BL1850

MAKITA is a registered trademark of Makita Corporation.

Operation

⚠WARNING

Inspect tool and dies 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.

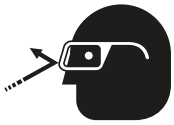


⚠WARNING

Electric shock hazard:

This tool is not insulated. When using this unit on or 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

Pinch points:

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

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
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
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)

Pressure Sensor

This tool is equipped with a pressure sensor that alerts the user of an incomplete crimp.

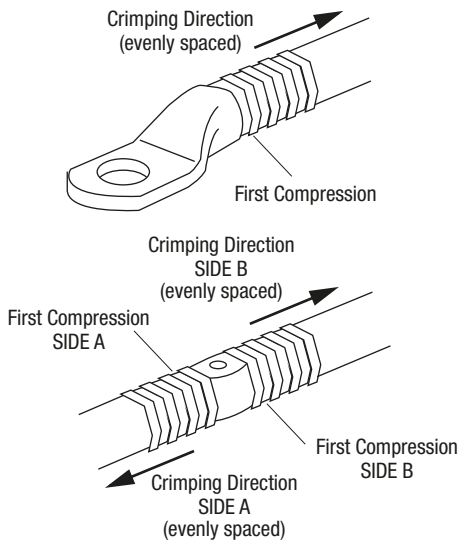
- If the tool is manually retracted before completion of a crimp, the red LED and an audible beep will be active for 2 seconds.
- If the tool is unable to reach the required crimp force, the red LED, work light, and an audible beep will pulse until after the trigger is released.

Installing Dies

1. Select the proper dies for the connector to be crimped.
2. Install dies in jaws making certain that they are properly secured by the spring-loaded, positive lock, die buttons.

Preparing Cable

Follow the lug manufacturer's instructions for appropriate cable strip length.



Crimping Procedure

1. Insert conductor into the connector and align the tool and die on the connector. Start in the center for splices; start on the end, nearest the pad, for terminals.
2. Activate the tool by pulling the trigger. Continue to hold the trigger until the ram retracts. This is the signal that the crimp is complete.
3. Continue crimping the connector until the correct number of crimps has been completed. Work from the center to the outer edges for splices, alternating sides, if possible, for the best compression connections.

⚠WARNING

An incomplete crimp can cause a fire.

- Use proper die, connector, and cable combinations. Improper combinations can result in an incomplete crimp.
- The relief valve sounds and the ram automatically retracts to indicate a completed crimp. If you do not hear the sound of the relieve valve or the ram does not automatically retract, the crimp is not complete.

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

CJ22 Jaw and KA22/KC22-type Die Selection

Note: This tool will provide a cUL and UL classified crimp ONLY when used with the CJ22 jaws and KA22- or KC22-type dies.

Note: This tool will provide 53 kN (6 tons) of crimping force when used with the CJ22 jaws.

Crimps made on copper cable with Greenlee KC22-type dies and the copper connectors listed here are cUL and UL classified.

Crimps made on copper or aluminum cable with Greenlee KA22-type dies and the dual-rated aluminum connectors listed here are cUL and UL classified.

Refer to "Connector Selection" for brand names and model numbers of appropriate lugs as well as crimping instructions.

Dies for Copper Connectors

Catalog Number	UPC Number	Cable Size	Color Code
KC22-8	03079	8 AWG	Red
KC22-6	03080	6 AWG	Blue
KC22-4	03081	4 AWG	Gray
KC22-2	03082	2 AWG	Brown
KC22-1	03083	1 AWG	Green
KC22-1/0	03084	1/0 AWG	Pink
KC22-2/0	03085	2/0 AWG	Black
KC22-3/0	03086	3/0 AWG	Orange
KC22-4/0	03087	4/0 AWG	Purple
KC22-250	03088	250 kcmil	Yellow
KC22-300	03089	300 kcmil	White
KC22-350	03090	350 kcmil	Red
KC22-400	03091	400 kcmil	Blue
KC22-500	03092	500 kcmil	Brown
KC22-600B	03094	600 kcmil	Green

Dies for Dual-rated Aluminum Connectors

Catalog Number	UPC Number	Cable Size
KA22-8	06744	8 AWG
KA22-6	06745	6 AWG
KA22-4	06746	4 AWG
KA22-2	06747	2 AWG
KA22-1	06749	1 AWG
KA22-1/0	06750	1/0 AWG
KA22-2/0	06751	2/0 AWG
KA22-3/0	06752	3/0 AWG
KA22-4/0	06753	4/0 AWG
KA22-250	06754	250 kcmil
KA22-300	06755	300 kcmil
KA22-350	06756	350 kcmil

Connector Selection

CJ22 Crimping Jaw Range: Copper — 8 AWG to 600 kcmil†; Dual-rated Aluminum — 8 AWG to 350 kcmil

When used with KC22-type dies, this tool is cUL and UL classified for use with the following connector brands:

Connector Type	Barrel Type	Anderson	Blackburn®	Burndy	ILSCO	Panduit	T&B	Penn-Union†	No. of Crimps*
Copper Splice	Short	VHSS	CSP	YS-L▲	CT	SCSS/SCS	54504-54518	BCU	A
	Long	VHS	CU	YS▲	CTL	SCL/SCH	54804-54818	BBCU	
Copper Lugs	Short	VHCS	CTL-2/CTL	YA-2LN/YA-L/YA-2L YA/YA-L-TC/YA-L-2TC	CSW CRA/CRB	LCAS/LCA LCD	54104-54118 54204-54218	BLU	
	Long	VHCL	CTL-L/LCN	YA-2N	CLN/CLW CRA-L/CRB-L CRA-2L/CRB-2L	LCB/LCC	54930BE-54918BE 54850BE-54876BE	BBLU	

When used with KA22-type dies, this tool is cUL and UL classified for use with the following connector brands:

Connector Type	Barrel Type	Anderson	Blackburn®	Burndy	ILSCO	Panduit**	T&B	Penn-Union	No. of Crimps*
Dual-rated Aluminum Splice	—	VACS	ASP	YS-A	AS ASN	SA	60501-60565	PIK	B
Dual-rated Aluminum Lugs	—	VACL	ATL	YA-A YA-ATN	ACL/ACN 2ACL/2ACN ALNS/ALNN/ALND	LAA/LAB	60101-60166 60230-60267	BLUA	

95R7

* Use the number of crimps listed in the last column instead of the number provided with the connector:

A — 8 to 1/0 AWG: 1 crimp
2/0 AWG to 600 kcmil: 2 crimps

B — 8 to 2 AWG: 2 crimps
1 to 3/0 AWG: 3 crimps
4/0 AWG to 350 kcmil: 4 crimps

** 6 AWG to 350 kcmil

† 500 kcmil maximum with Penn-Union connectors

▲ 8 AWG to 350 kcmil with Burndy copper splices

LCD Screen

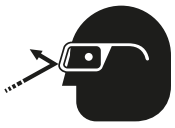
This tool has an LCD screen, which displays information about the tool. Turn on the screen by inserting the battery and jogging the tool. If there are any problems with the tool, an error code appears.

Error Code	Meaning
1	Overcurrent fuse
2	Overcurrent comparator
3	Overheated circuit board
4	Overheated battery
5	Battery empty; operation stops
6	Faulty crimp; complete cycle
7	Faulty crimp; 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	
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	
5	
6	Cycles until next service
7	Since manufacturing: operating hours, capacity, number of cycles

Maintenance



⚠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

Pinch points:

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

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

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, 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 Crimps

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.

Problem	Possible Cause	Probable Remedy
Tool is inoperative.	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 crimp. 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.
LED glows for 20 seconds.	Battery charge low.	Charge or replace battery.
Tool loses oil.	Damaged internal seal.	Contact Greenlee customer service at 800-435-0786 for warranty service or repair.



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