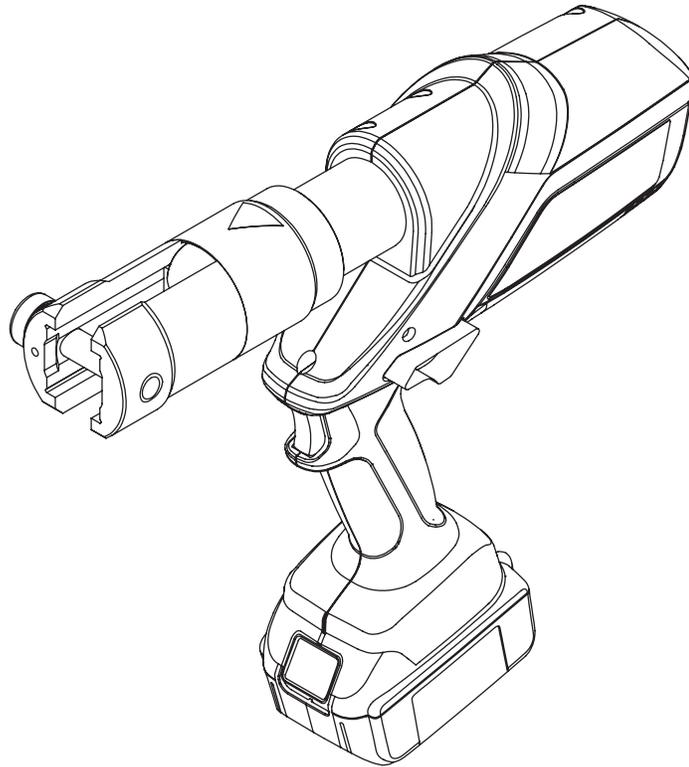


# OPERATION MANUAL



Serial Number



## **Pistol Grip Battery-powered Pressing Tool**

### **PSTLPRESS-TOOL32kN**



**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

The Greenlee Pistol Grip Battery-powered Pressing Tool is a hand-held, self-contained pressing tool intended to press 1/2" through 2" copper, steel, and PEX fittings and valves.

This 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.

## 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:

PSTLPRESS-TOOL32kN

Pistol Grip Battery-powered Pressing Tool

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.

## ***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.

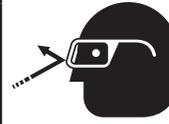
Failure to observe this warning could result in severe injury or death.



**⚠ 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**

Pinch points:

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

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

**⚠ 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.

## **IMPORTANT SAFETY INFORMATION**

### **⚠ WARNING**

Inspect tool and jaws 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.
- Do not operate this tool without a fitting in place. Damage to the pressing head can result.

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

### **⚠ CAUTION**

An incomplete press can cause leaks.

- Use proper fitting and tubing combinations. Improper combinations can result in an incomplete press.
- The relief valve will sound and the drive rollers automatically retract when a complete press has been achieved. If you do not hear a "pop" and the drive rollers do not automatically retract, the press is not complete

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**

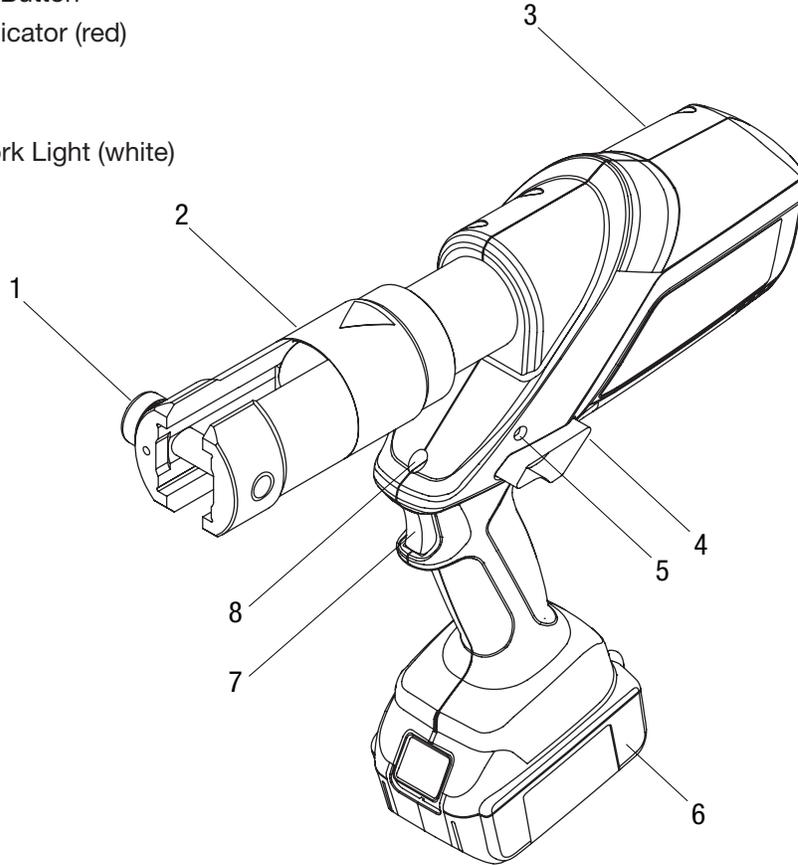
Do not perform any service or maintenance other than as described in this manual. Injury or damage to the tool may result.

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. Pressing Head
- 3. Housing
- 4. Retract Button
- 5. LED Indicator (red)
- 6. Battery
- 7. Trigger
- 8. LED Work Light (white)



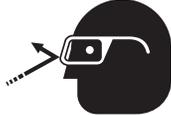
**Specifications**

Pressing Tool	
Length.....	14.45" (367 mm)
Width .....	2.95" (75 mm)
Depth.....	12.48" (317 mm)
Weight (with battery).....	7.8 lb (3.5 kg)
Operating Force.....	3.6 ton (32 kN)
Hydraulic Oil .....	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

## Operation

<b>⚠ WARNING</b>	
<p>Inspect tool and jaws before use. Replace any worn or damaged parts. A damaged or improperly assembled tool can break and strike nearby personnel.</p> <p>Failure to observe this warning could result in severe injury or death.</p>	

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

	<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>Pinch points:</p> <ul style="list-style-type: none"> <li>Remove battery before changing dies, adapters, or jaws.</li> <li>Keep hands away from the pressing tool head when pressing.</li> </ul> <p>Failure to observe these warnings could result in severe injury or death.</p>

<b>⚠ CAUTION</b>
<p>An incomplete press can cause leaks.</p> <ul style="list-style-type: none"> <li>Use proper fitting and tubing combinations. Improper combinations can result in an incomplete press.</li> <li>The relief valve will sound and the drive rollers automatically retract when a complete press has been achieved. If you do not hear a “pop” and the drive rollers do not automatically retract, the press is not complete.</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 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> <li>Do not operate this tool without a fitting in place. Damage to the pressing head can result.</li> </ul> <p>Failure to observe these precautions may result in injury or property damage.</p>

### Important Features of the Unit

- The hydraulic unit incorporates an automatic retraction, which returns the drive rollers to their starting position when the maximum operating pressure is reached.
- The unit is equipped with a special brake, which stops the forward motion of the drive rollers when the trigger is released.
- The unit is equipped with a double piston pump, which is characterized by a rapid approach of the drive rollers toward the jaws and a slow pressing motion.
- The pressing head can be smoothly turned by 350° around the longitudinal axis in order to gain better access to tight corners and other difficult working areas.
- The tool is equipped with a microprocessor, which indicates service intervals, internal checks, and low battery charges. It also shuts off the motor automatically after the pressing cycle is complete.

## Operation (cont'd)

### 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

### Pressure Sensor

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

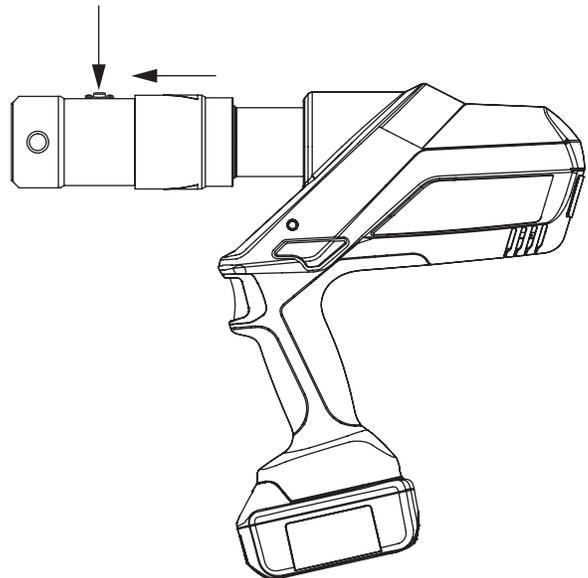
- If the tool is manually retracted before completion of a press, the red LED and an audible beep will be active for 2 seconds.
- If the tool is unable to reach the required pressing force, the red LED, work light, and an audible beep will pulse until after the trigger is released.

### Operating Procedure for Copper, Steel, and PEX Jaws

1. Select the proper pressing jaw for the intended application. Examine the jaw for wear, damage, dirt or copper buildup. Clean the compression area if dirty and replace if worn or damaged.

	<b>⚠ WARNING</b>
	<p>Before changing the pressing jaws, remove battery to avoid unintentional operation.</p> <p>Failure to observe this warning could result in severe injury or property damage.</p>

2. Check that the red protective sleeve is in the forward position and the **jaws 1/2" to 2"** marking is visible on the tool. If not, depress the button on the protective sleeve and move the sleeve to the forward position (see view below). Release the button to secure the protective sleeve.



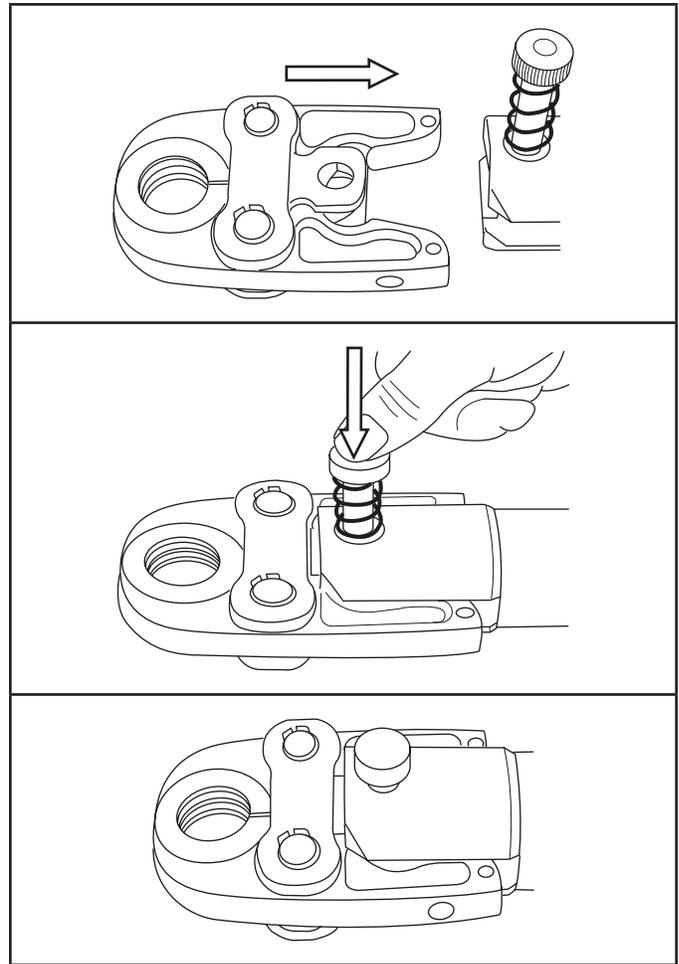
*Note: Rollers must be in the forward position to allow the sleeve to be moved to the correct position.*

**Operation (cont'd)**

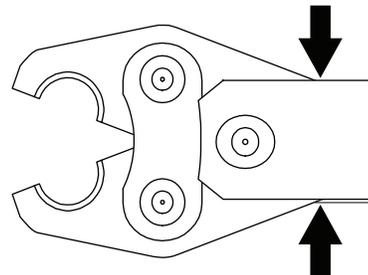
3. Depress lock pin (see views below) and rotate counterclockwise to disengage the pin on the pressing tool.



4. Install the jaw into the pressing tool and align mounting hole in jaw with lock pin. Depress the lock pin to secure the jaw (see views below).



5. Compress the ends of the jaw together to open the jaws and locate the jaws around the fitting to be pressed (see view below).



**Operation (cont'd)**

- Reinstall the battery and depress the tool trigger to press the fitting. Continue to depress the trigger until the relief valve actuates and the drive rollers automatically retract.

*Notes:*

*If the drive rollers do not automatically retract, the press is incomplete.*

*The pressing cycle can be interrupted at any moment by releasing the trigger.*

*It is normal for the battery load display to light at both the beginning and near the end of the pressing cycle.*

- Release the trigger until the drive rollers retract completely.
- Compress the jaw ends together to open the jaws and remove the jaws from the pressed fitting.

*Notes:*

*The pressing jaws must close completely to ensure a leak-free connection. Always check that jaws close completely during a pressing cycle and no foreign objects are between the pressing jaws and mechanism.*

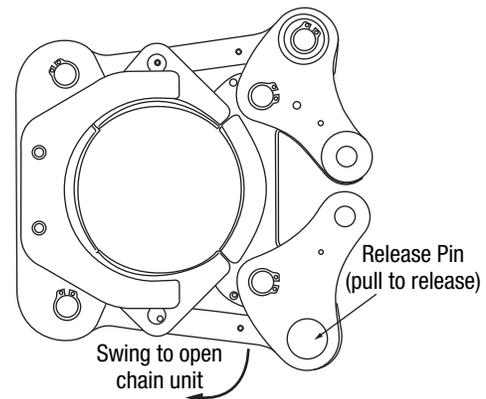
*The pressing cycle can be interrupted at any moment by releasing the trigger.*

*If it is necessary to remove the jaws before a press cycle is complete, push the retract button. Pushing the retract button will cause the drive rollers to retract completely.*

*If the pressing cycle must be stopped before the press is complete, and the jaws or chain have to be removed from the fitting, the fitting should be replaced or pressed a second time.*

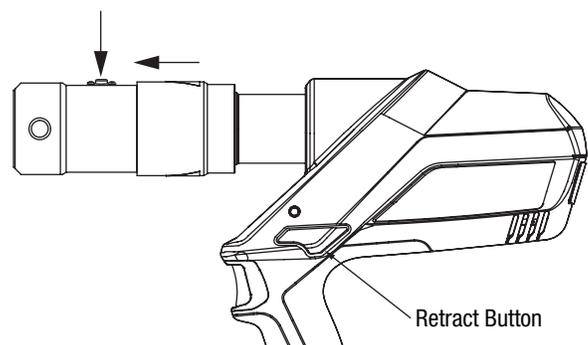
**Operating Procedure for Pressing 1/2" through 2" Fittings Using Press Chain**

- Select the proper size pressing chain for the intended application. Examine the chain for wear, damage, dirt or copper buildup. Replace if worn or damaged and remove any dirt or copper buildup with a brush or soft cloth with light lubricating oil.
- Disengage the release pin on the pressing chain (see view below) and open the chain. Install the pressing chain around the fitting to be pressed and re-engage the pin on the pressing chain.



	<b>⚠ WARNING</b>
	<p>Before installing the pressing jaws, remove battery to avoid unintentional operation.</p> <p>Failure to observe this warning could result in severe injury or property damage.</p>

- Check that the red protective sleeve is in the rear position and the **chains 1/2" to 2"** marking is visible on the tool. If not, depress the button on the protective sleeve and move the sleeve to the rear position (see view below). Release the button to secure the protective sleeve.



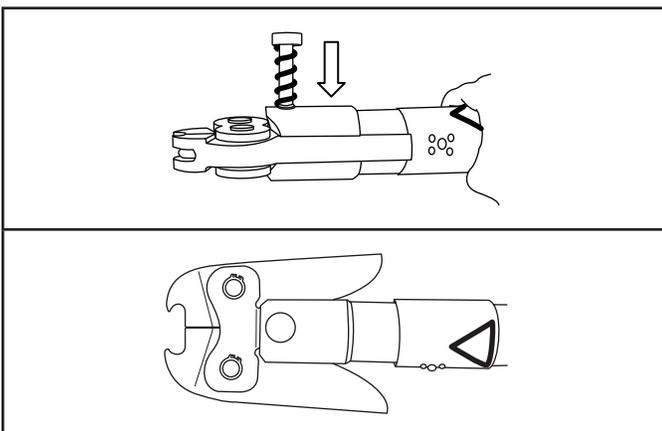
- Depress retract button to retract rollers to the back position or complete a trigger cycle to achieve same result.

## Operation (cont'd)

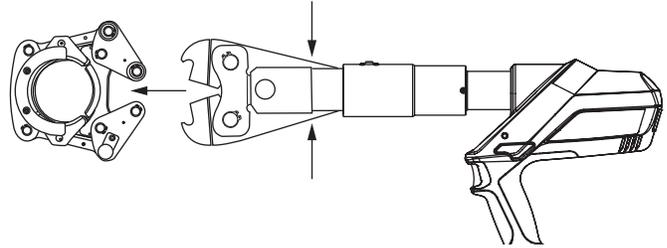
- Depress lock pin (see views below) and rotate counterclockwise to disengage the lock pin on the pressing tool.



- Install the adapter jaw into the pressing tool and align mounting hole in jaw with pin. Depress the pin to secure the adapter jaw (see views below).



- Compress the ends of the adapter jaw together to open the jaws and install the adapter jaw into the pressing chain (see view below).



- Reinstall the battery on the tool.
- Depress the tool trigger to press the fitting. Continue to depress the trigger until the relief valve actuates and the drive rollers automatically retract.

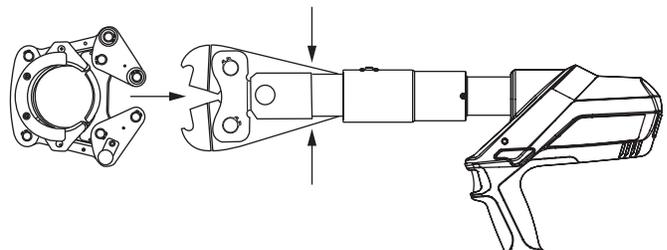
### Notes:

*If the drive rollers do not automatically retract, the press is incomplete.*

*The pressing cycle can be interrupted at any moment by releasing the trigger.*

*It is normal for the battery load display to light at both the beginning and near the end of the pressing cycle.*

- Release the trigger until the drive rollers retract completely.
- Compress the adapter jaw ends together to open the jaws and remove the adapter jaw from the pressing chain (below).



- Disengage the release pin on the pressing chain and remove the pressing chain from the pressed fitting.

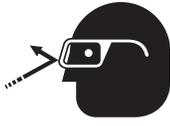
### Notes:

*The pressing jaws must close completely to **ensure a leak-free connection**. Always check that jaws close completely during a pressing cycle and no foreign objects are between the pressing jaws and mechanism.*

*The pressing cycle can be interrupted at any moment by releasing the trigger.*

*If the pressing cycle must be stopped before the press is complete, and the jaws or chains have to be removed from the fitting, or the adapter jaw has to be removed from the chain, the fitting should be replaced or pressed a second time.*

## 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> <ul style="list-style-type: none"> <li>Do not use hands to check for oil leaks. Oil under pressure easily punctures skin. If injured, seek medical attention immediately to remove oil.</li> <li>Depressurize the hydraulic system before servicing.</li> </ul> <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>Pinch points:</p> <ul style="list-style-type: none"> <li>Remove battery before changing dies, adapters, or jaws.</li> <li>Keep hands away from the pressing tool head when pressing.</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 jaws or chains 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 350°. 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

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

### Annually or After 10,000 Presses

1. Replace the hydraulic oil.
2. Contact Greenlee customer service at 800-435-0786 for warranty service or repair.

### Checking the Oil Level

1. Remove the screws holding the housing cover together.
2. Point the pressing 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.	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 press. 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.
Jaws stop during operation.	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. Hold for approximately 10 seconds.
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.