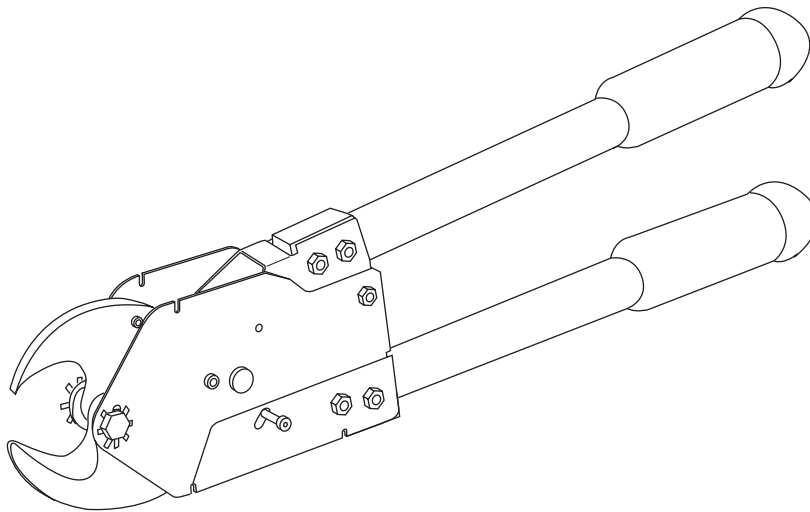


# INSTRUCTION MANUAL



**GREENLEE®**  
A Textron Company



## **763 & 764M4 Ratchet Cable Cutters**



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

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## Safety

Safety is essential in the use and maintenance of Greenlee tools and equipment. This instruction 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

This instruction manual is intended to familiarize personnel with the safe operation and maintenance procedures for the following Greenlee 763 and 764M4 Cable Cutter.

Keep this manual available to all personnel.

Replacement manuals are available upon request at no charge.

## Description

Greenlee 763 and 764M4 Ratchet Cable Cutters are non-insulated cutting tools intended for use on copper and standard aluminum electrical cable. The 763 will accommodate up to 500 MCM copper or 795 MCM aluminum cable. The 764M4 will cut up to 750 MCM copper or 795 MCM aluminum cable.

Both cable cutters ratchet and are equipped with fiberglass handles and rubber grips to limit operator fatigue.

They are not intended for use on ACSR (aluminum cable, steel-reinforced) cable.

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.

Loctite is a registered trademark of Loctite Corporation.

416 Super Bonder is a registered trademark of Loctite Corporation.

Molykote is a registered trademark of Dow Corning Corporation.

# ***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**

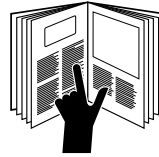
Immediate hazards which, if not avoided, **WILL** result in severe injury or death.

#### **⚠ 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.




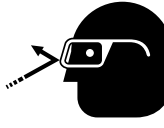
#### **⚠ WARNING**


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.

## **IMPORTANT SAFETY INFORMATION**

	<p><b>⚠ WARNING</b></p> <p>Electric shock hazard: This is not an insulated tool. Contact with live circuits could result in severe injury or death.</p>
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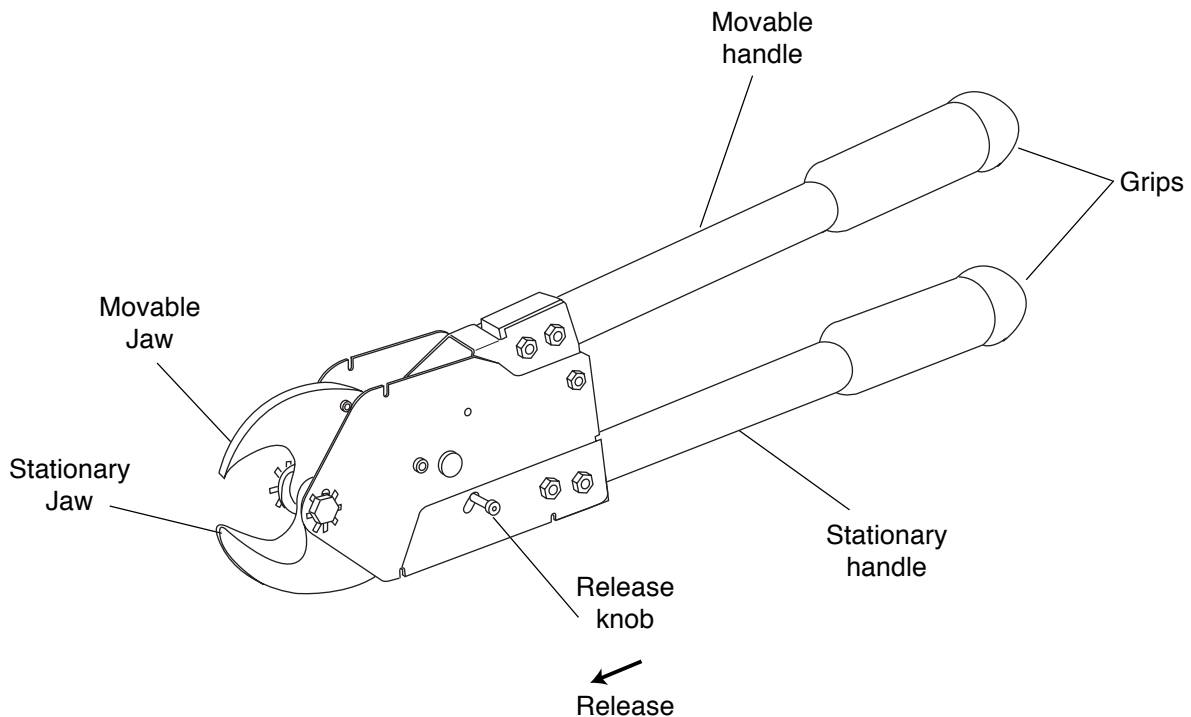
	<p><b>⚠ WARNING</b></p> <p>Wear eye protection when using this tool. Failure to wear eye protection could result in serious eye injury from flying debris.</p>
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	<p><b>⚠ WARNING</b></p> <p>Keep hands away from closing blades.</p>
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	<p><b>⚠ WARNING</b></p> <p>Pinch points: Keep hands away from moving parts.</p>
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<p><b>⚠ CAUTION</b></p> <ul style="list-style-type: none"><li>• This tool is intended for two-handed operation. Maintain a firm grip on both handles during operation.</li><li>• Do not cut ACSR or steel.</li><li>• Do not exceed the rated capacity of this tool.</li><li>• Inspect before use. Replace any worn or damaged parts.</li><li>• Do not perform any service or maintenance other than as described in this manual.</li></ul> <p>Failure to observe these precautions may result in injury or property damage.</p>
---

## Identification



## Specifications

	<b>763</b>	<b>764M4</b>
Mass/Weight .....	2.15 kg (4.75 lb)	2.4 kg (5.25 lb)
Length .....	349 mm (13.75")	486 mm (19.125")
Width		
at blades .....	102 mm (4.03")	102 mm (4.03")
at handles .....	132 mm (5.19")	152 mm (6")
Thickness .....	63.5 mm (2.5")	63.5 mm (2.5")
Jaw opening (minimum) .....	30 mm (1.188")	30 mm (1.188")
Handle force at Maximum Copper Capacity .....	334 N (75 lb)	267 N (60 lb)


### Maximum Rated Capacity

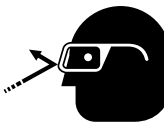
Copper (600-Volt Building Wire) .....	240 mm <sup>2</sup> (500 Kcmil)	400 mm <sup>2</sup> (750 Kcmil)
Aluminum (600-Volt Building Wire) .....	400 mm <sup>2</sup> (795 Kcmil)	400 mm <sup>2</sup> (795 Kcmil)
Communications Cable .....	30 mm (1.188") O.D.	30 mm (1.188") O.D.

### Frequent Use

Copper (600-Volt Building Wire) .....	170 mm <sup>2</sup> (350 MCM)	240 mm <sup>2</sup> (500 MCM)
Aluminum (600-Volt Building Wire) .....	240 mm <sup>2</sup> (500 MCM)	400 mm <sup>2</sup> (750 MCM)

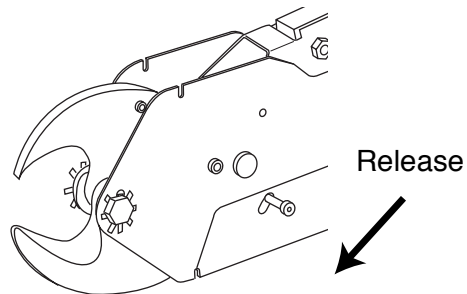
## Operation

	<b>⚠ WARNING</b>
	Electric shock hazard: This is not an insulated tool. Contact with live circuits could result in severe injury or death.

	<b>⚠ WARNING</b>
	Wear eye protection when using this tool. Failure to wear eye protection could result in serious eye injury from flying debris.

<b>⚠ CAUTION</b>
<ul style="list-style-type: none"><li>• This tool is intended for two-handed operation. Maintain a firm grip on both handles when using this tool.</li><li>• Inspect before use. Replace any worn or damaged parts.</li></ul> <p>Failure to observe these precautions may result in injury or property damage.</p>

1. Place the cable to be cut between the jaws.
2. Press the handles together until the ratchet clicks once.
3. Open the handles until the ratchet clicks again.
4. Repeat steps 2 and 3 until cable is completely cut.
5. To open the blades, lift the movable handle until it stops. Press the release knob outward as shown.

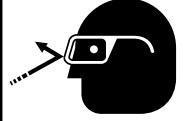


## Maintenance

### General


Maintain the tool with care. Keep the blades sharp and the tool clean for better and safer performance. Follow instructions for lubricating the cutter; lubrication prolongs the tool life and enables the tool to cut with less force. Keep grips dry, clean and free from oil and grease.

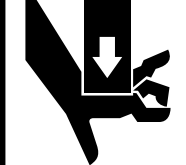
### Cleaning the cutter

	<p><b>⚠ WARNING</b></p> <p>Wear eye protection when using this tool. Failure to wear eye protection could result in serious eye injury from flying debris.</p>
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Blow dirt and/or cable particles out of the drive mechanism with compressed air.

### Lubricating the cutter

	<p><b>⚠ WARNING</b></p> <p>Keep hands away from closing blades.</p>
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	<p><b>⚠ WARNING</b></p> <p>Pinch points: Keep hands away from moving parts.</p>
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Close jaws and place 3-in-1 oil or equivalent on the blades. Oil the jaw bolt (25), spacer (4), and jaw areas around them. Also oil the master gear (16) and pawls (15) at their respective shafts (19) and contact surfaces. Oil the inside of the housing plates (13, 23) where contacted by the lever handle plates (14, 22). Open and close the cutter to spread the oil.

Disassemble, clean, and lubricate the tool if it does not operate smoothly.

## Maintenance (cont'd)

### Disassembly

This tool consists of three basic operating mechanisms (see Figure 1).

1. Cutter jaw mechanism: stationary jaw (1), movable jaw (3), jaw bolt (25), jaw spacer (4), return spring (5), and related hardware.
2. Jaw drive mechanism: master drive gear (16), master gear shaft (26), drive pawl (15), pawl spring (12), pawl shaft (19), top and bottom handle plates (14, 22) and operating lever.
3. Jaw holding mechanism: holding pawl (15), pawl spring (17), pawl shaft (19) and pawl release pin (27).

Both the jaw mechanism and drive mechanism can be removed and serviced without disassembly of the housing.

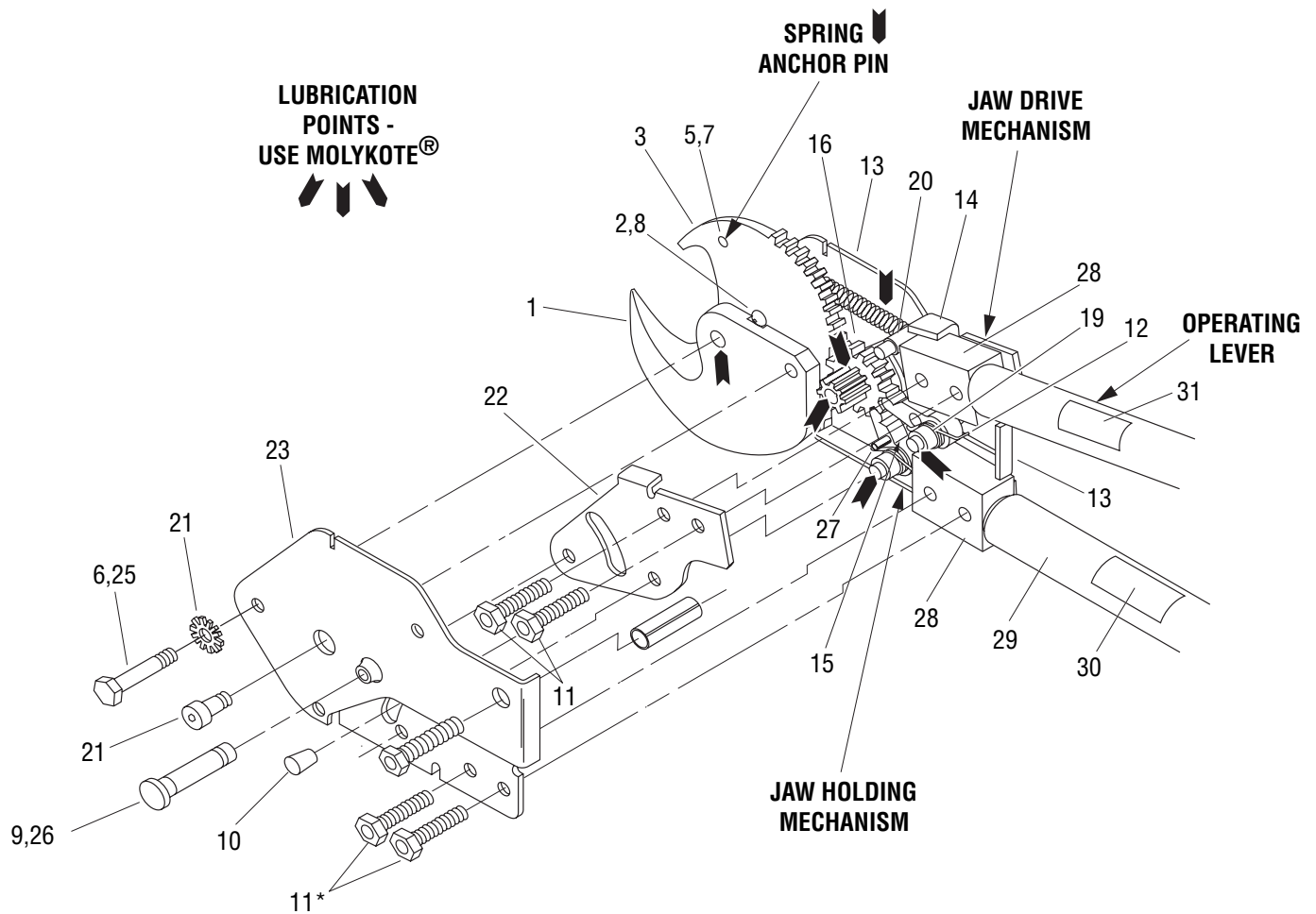
1. Remove cap screw (21). Release tension on extension spring (5) by opening the operating lever and rotating release pin (27) outward.
2. Remove nut (6).
3. Remove bolt (25) and spacer (4).
4. Disconnect spring (5) from housing (13).
5. Remove retaining ring (9) from gear shaft (26). Also remove two screws (8) from stop pin (20).
6. Remove shaft (26) and gear (16).
7. Remove the operating lever assembly.
8. Remove rubber bumpers (10) from release pin (27).
9. Remove two housing screws (11). Lift housing from tool.
10. Remove two screws (11) to disassemble operating lever assembly and remove pawl (15), pawl spring (12) and pawl shaft (19).



## Maintenance (cont'd)

### Assembly

Figure 1



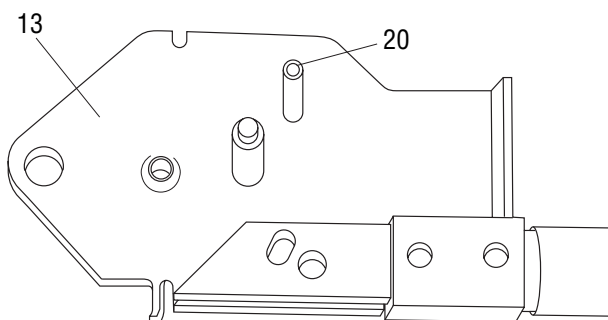
## Maintenance (cont'd)

### Assembly (cont'd)

*Note: Use Loctite® 262 Threadlocker on all screws and tighten all 5/16" diameter screws to 190/170 in-lb. Use Loctite 416 Super Bonder® (cyanoacrylate) to attach release pin bumpers (10). Lubricate moving parts with Molykote® grease (see Figure 1).*

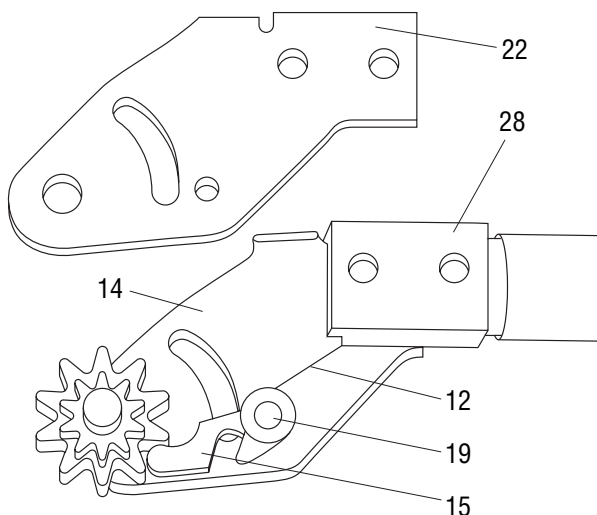
1. Assemble handle assembly (39) to bottom of housing plate (13) using two screws (11).
2. Install stop pin (20). Place a spare 3/8" x 1.500" screw through the master gear hole in bottom housing plate (13) and place assembly on bench with screws up (see Figure 2).

**Figure 2**



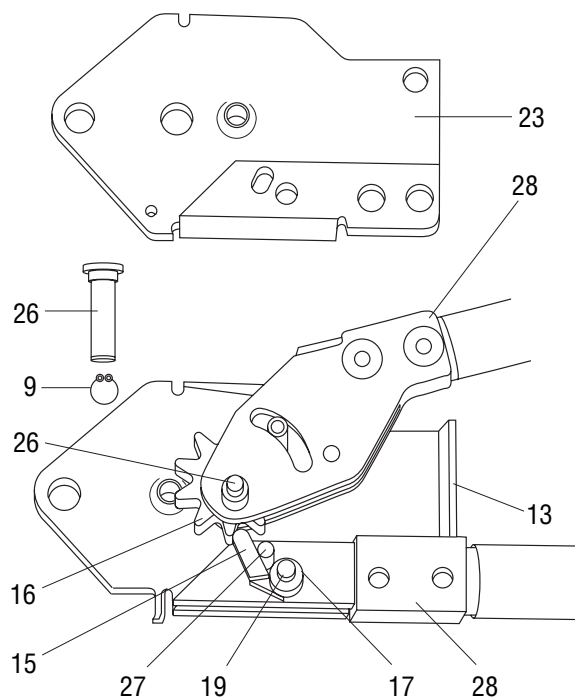
3. Lubricate pawl shaft (19) and assemble pawl shaft, pawl (15) with pin (33) projecting from pawl surface, spring (12), bottom handle plate (14) and top handle plate (22) to handle assembly using two screws (11). The long leg of the spring goes against the bottom handle adapter (28) and the short leg goes under the pawl (see Figure 3).

**Figure 3**



4. Insert master gear (16) between top and bottom handle plates against drive pawl (15) and assemble over spare screw in bottom housing plate (see Figure 4).
5. Place holding pawl (15) with release pin (27) and spring (17) over hole in bottom housing plate and insert lubricated pawl shaft (19). The pawl will engage the master gear. The long leg of the spring goes against the handle adapter (28) where it touches the bottom housing plate and the short leg goes under the pawl (see Figure 4).
6. Thread housing cover (35) between handle plates above the master gear—between spring (17) and handle adapter (28) (see Figure 4).

**Figure 4**



## Maintenance (cont'd)

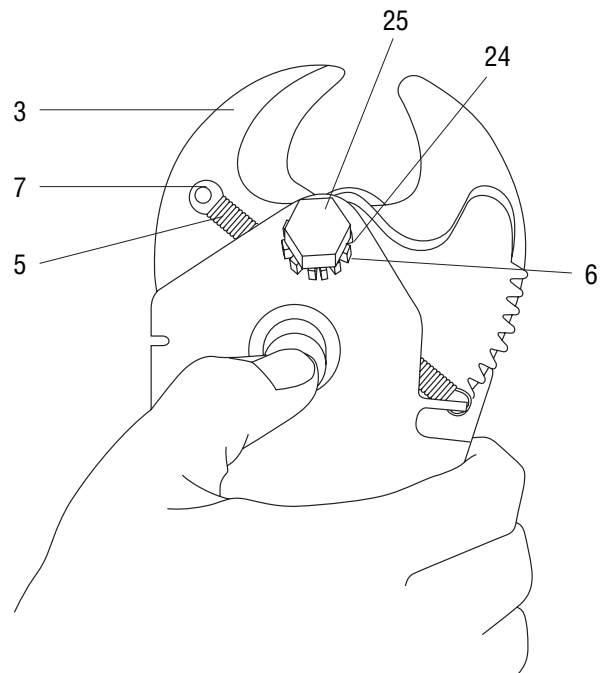
### Assembly (cont'd)

7. Place top housing plate (23) over tool assembly, using spare 3/8" screw and release pin (27) for alignment. Assemble nuts (18) loosely to hold housing in place.
8. Lubricate gear shaft (26) and assemble in place of 3/8" spare screw.
9. Assemble retaining ring (9) to gear shaft (26).
10. Assemble bumpers (10) to pin (27).

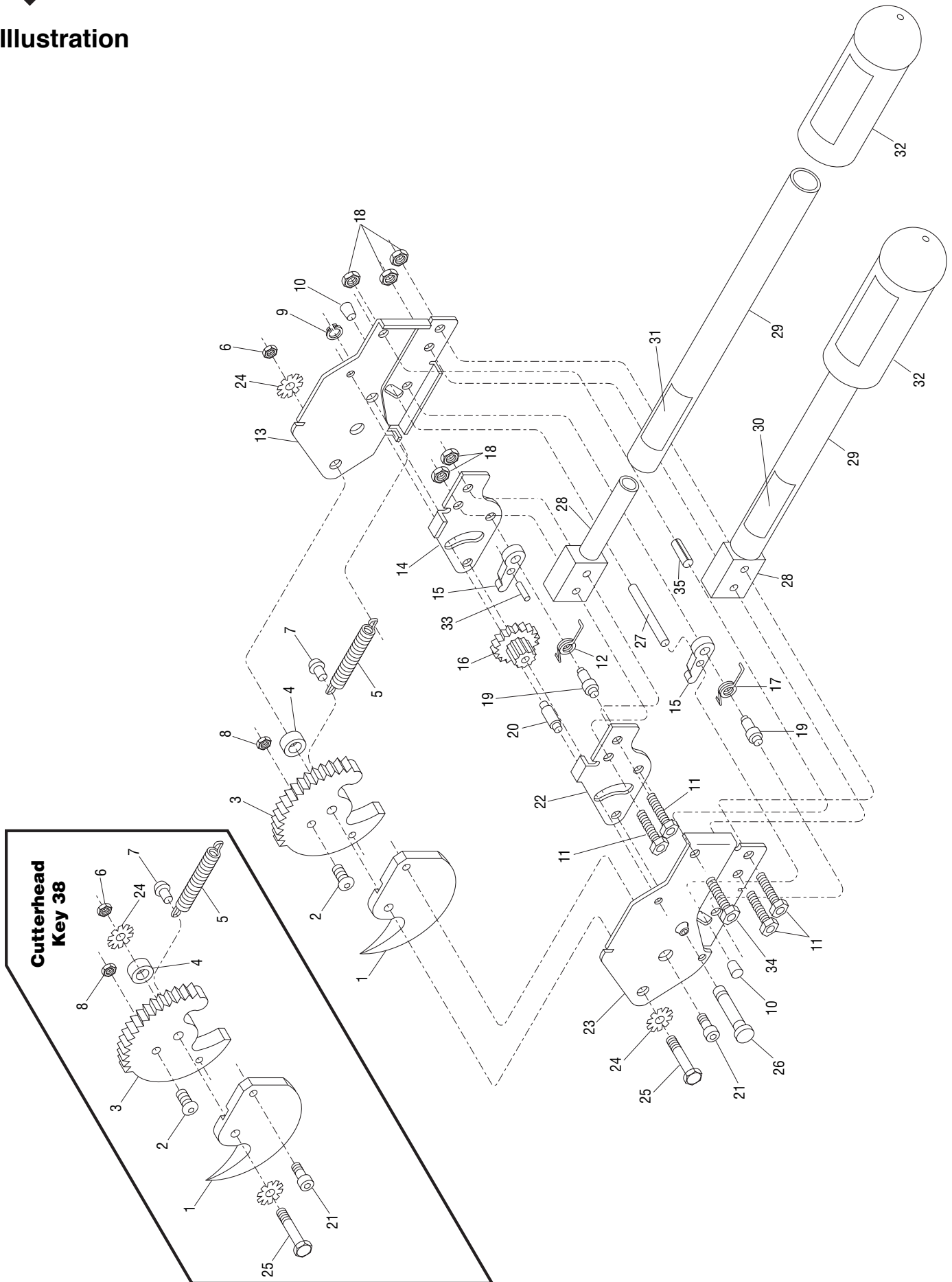
*Note: To replace jaws, see steps 11-18; also see Figure 5 and exploded view. To replace entire cutter head (38), skip steps 11, 12, and 15.*

11. Assemble spring (5) to movable jaw (3) using stud (7).
12. Assemble screw (2) and nut (8) into movable jaw (3).
13. Reconnect spring (5) to housing (13).
14. Assemble fixed jaw (1), movable jaw (3) and spacer (4) into housing assembly using lubricated bolt (25), nut (6) and two nut retainers (24).
15. Assemble jaw anchor screw (21).
16. Tighten nut (6) to a maximum jaw clearance of .2 mm (0.007"). To achieve .2 mm (0.007") clearance, tighten nut (6) snugly so that jaws are against each other. Then back off nut to the first open slot aligned with the drive pin hole. There should be not more than .2 mm (0.007") gap between blades. Operate the cutter to ensure that the jaws move freely.
17. Bend tab (5) on nut retainer (24) to secure nut (6).
18. Apply adhesive Loctite 416 Super Bonder sparingly to assemble two bumpers (10) (see Figure 1).

**Figure 5**



**Illustration**





## Parts List

Key	763 Part No.	764 M4 Part No.	Description	Qty
1	50386255	50386255	Jaw, stationary cutter .....	1
2	90505794	90505794	Screw, 1/4–20 x .500" socket head .....	1
3	50384759	50384759	Jaw, movable cutter .....	1
4	50355325	50355325	Spacer, 0.380" x .750" x .376" .....	1
5	90539850	90539850	Spring, extension 0.202" x .300" x 2.75" .....	1
6	90541197	90541197	Nut, hex, 3/8–24 .....	1
7	90535995	90535995	Stud, 0.161" x .500" .....	1
8	90541200	90541200	Nut, 1/4–20 lock .....	1
9	90504534	90504534	Ring, retaining, Truarc® #5100-37 .....	1
10	90539427	90539427	Bumper, 0.187" x .375" x .500" rubber .....	2
11*	90552652	90552652	Screw, cap, 5/16–24 x 1.25" .....	4
12	50381407	50381407	Spring, torsion .....	1
13	50055690	50055690	Plate, housing bottom .....	1
14	50355260	50355260	Plate, bottom handle .....	1
15	50356488	50356488	Pawl .....	2
16	50356461	50356461	Gear, master 12T .....	1
17	50356216	50356216	Spring, torsion, 0.380" x .450" x .140" .....	1
18*	F009550	F009550	Nut, 5/16–24 lock .....	5
19	50355384	50355384	Shaft, pawl 0.312" x 1.00" .....	2
20	50384783	50384783	Pin, stop .....	1
21	90539877	90539877	Screw, cap, 5/16–18 x .312" socket head .....	1
22	50355252	50355252	Plate, top handle .....	1
23	50399110	50055674	Plate, housing top .....	1
24	50384813	50384813	Retainer, nut .....	2
25	90542690	90542690	Bolt, blade, 3/8–24 x 1.75" .....	1
26	50055402	50055402	Shaft, master gear .....	1
27	90539419	90539419	Pin, roll, 0.187" x 2.00" .....	1
28*	50384937	50384937	Adapter, handle .....	2
29*	50055550	50355406	Handle .....	2
30*	50034669	50034669	Decal, warning .....	1
31*	50351907	50351907	Decal, small Greenlee safety .....	1
32*	50223003	50223003	Grip, rubber, 0.995" x 1.50" x 5.09" .....	2
33	90540077	90540077	Pin, roll, 0.187" x .375" .....	1
34	90505247	90505247	Screw, cap, 5/16–18 x 1.500" .....	1
35	50057219	50057219	Spacer .....	1

## Repair Parts List

Key	Part No.	Description	Qty
38	50360370	Cutter head (includes keys 1–8, 21, 24, 25, 33) .....	1
*	50358855	Handle assembly - one handle and hardware for 764M4 (includes keys 11, 18, 28-32) .....	1
*	50059521	Handle assembly - one handle and hardware for 763 (includes keys 11, 18, 28-32) .....	1



USA	800-435-0786	Fax: 800-451-2632
	815-397-7070	Fax: 815-397-1865
Canada	800-435-0786	Fax: 800-524-2853
International	+1-815-397-7070	Fax: +1-815-397-9247

4455 Boeing Drive • Rockford, IL 61109-2988 • USA • 815-397-7070  
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