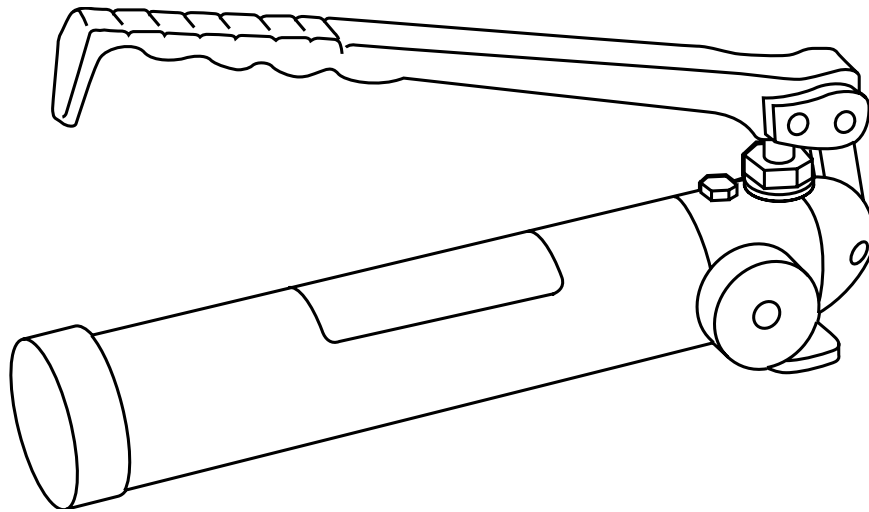


OPERATION, SERVICE AND PARTS INSTRUCTION MANUAL



767 HAND PUMP



Read and understand this material before operating or servicing this equipment. Failure to understand how to safely operate this tool could result in an accident causing serious injury or death. This device should only be operated by qualified personnel.

Description

The 767 Hydraulic Hand Pump develops 6500 psi (44,818 kPa) at .0823 in³ (1.3 cm³) per stroke and is intended to power Greenlee model 746, 746C hydraulic rams and model 15631 single-acting hydraulic rams. These pump/ram combinations are used in the following Greenlee punch driver and cable cutter kits:

Cable Cutter: model 750

Punch Drivers: model 1731

model 7306 and 7306SB

model 7310 and 7310SB

model 7506

model 7646

Fill with Greenlee hydraulic oil or Mobil DTE-13 only.

Purpose of this Manual

This instruction manual is intended to familiarize operators and maintenance personnel with safe operating and maintenance procedures associated with the 767 Hydraulic Hand Pump. This manual should be kept available to operating and maintenance personnel.



SAFETY ALERT SYMBOL

The symbol above is used to call your attention to instructions concerning your personal safety. Watch for this symbol. It points out important safety precautions. It means **“ATTENTION! Become alert! Your personal safety is involved!”** Read the message that follows and be alert to the possibility of personal injury or death.

DANGER

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

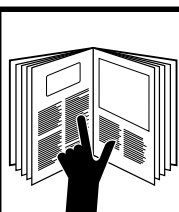
WARNING

Hazards or unsafe practices which **COULD**, if not avoided, result in severe personal injury or death.

CAUTION

Hazards or unsafe practices which **COULD**, if not avoided, result in minor personal injury or property damage.

Safety is a critical factor in the design of Greenlee equipment. The best program starts with a safety-conscious operator. The information highlighted in this bulletin describes operating practices for the benefit of the workers who will use our equipment in their daily jobs. Comments from users are appreciated.



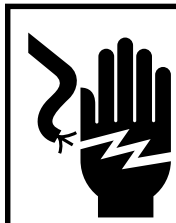
WARNING

A person who has not read and does not understand all operating instructions is not qualified to operate this tool.

Failure to read and understand safety instructions may result in injury or death.



IMPORTANT SAFETY INSTRUCTIONS

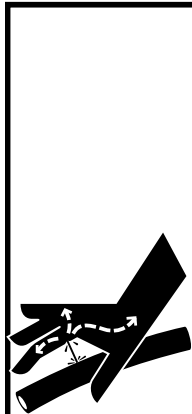


⚠ WARNING

Electric shock hazard:
This is not an insulated tool.
Contact with live circuits can result in severe injury or death.

⚠ WARNING

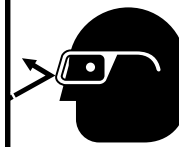
Inspect pump, hoses and couplers. Replace any worn, damaged or missing components with Greenlee replacement parts.



⚠ WARNING

Skin injection hazard:
Oil under pressure easily punctures skin causing serious injury, gangrene or death. If you are injured by escaping oil, seek medical attention immediately.

- Hand-tighten all couplers completely before operating the pump. Do not use tools to tighten the couplers.
- Do not use fingers or hands to check for leaks while operating the pump.
- Do not hold hose or couplers while operating the pump.
- Release the hydraulic pressure before disconnecting hoses or couplers, and before servicing the pump or accessory.



⚠ WARNING

Wear eye protection when using this pump.

⚠ WARNING

Follow the operating instructions and safety information supplied with the hydraulic ram or accessory.

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

⚠ CAUTION

- Use this tool for the manufacturer's intended use only.
- Work in areas that are well-lit, uncluttered and dry.

SAVE THESE INSTRUCTIONS

Additional copies of this manual are available upon request at no charge.



Operation

1. Remove the dust cap.
2. Connect the hose to the punch driver or cable cutter.

*Note: Hand-tighten the couplers completely.
Do not use tools.*

3. Twist the release knob (1) clockwise to CLOSE.
4. Pump the lever (24) until the operation is complete.

Note: After replacing any component of the hydraulic system, the pump may not contain enough hydraulic fluid to complete the operation. Twist the release knob (1) counterclockwise to OPEN to release any hydraulic pressure. Follow the filling instructions under Fill the Pump with Oil.

5. Twist the release knob (1) counterclockwise to OPEN.
6. Disconnect the hose from the punch driver or cable cutter. Replace all dust caps.

Filling the Pump with Oil

1. Clamp the pump into a vise with the end cap (7) upward. Remove the end cap.
2. Remove the cap screw (29) with O-ring (28) from the reservoir follower (12). Remove the follower from the reservoir. Inspect both V-packings (11); replace them if they are worn or damaged.
3. Pour Greenlee hydraulic oil* into the reservoir until it is within 3/4" from the top.
4. Reinstall the reservoir follower.
5. Turn the release knob (1) counterclockwise to OPEN. Pump the lever (24) two or three times.
6. Turn the release knob (1) clockwise to CLOSE. Pump the lever (24) two or three times.
7. Slowly turn the release knob (1) counterclockwise to OPEN. This will allow any air trapped in the pump block (5) or reservoir (10) to escape.
Note: Do this slowly to prevent the oil from suddenly gushing up through the cap screw hole.
8. Repeat steps 5 through 7 one or two more times.
9. Inspect the O-ring (28) in the cap screw (29); replace the O-ring if it is worn or damaged.
10. Replace the cap screw (29) with O-ring (28) in the follower. Hand-tighten the cap screw.
11. Wipe any excess oil from the outside of the reservoir and replace the end cap (7).

* Order Greenlee hydraulic oil by the gallon (905 1059.3) or by the quart (905 0806.8).

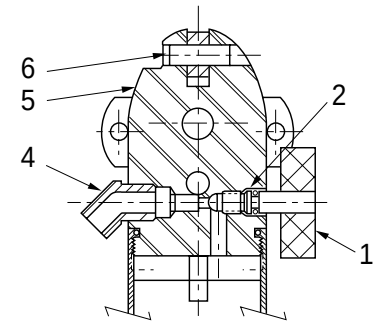
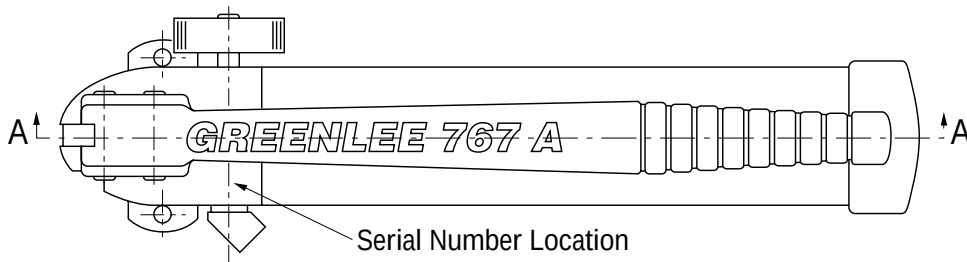


Troubleshooting

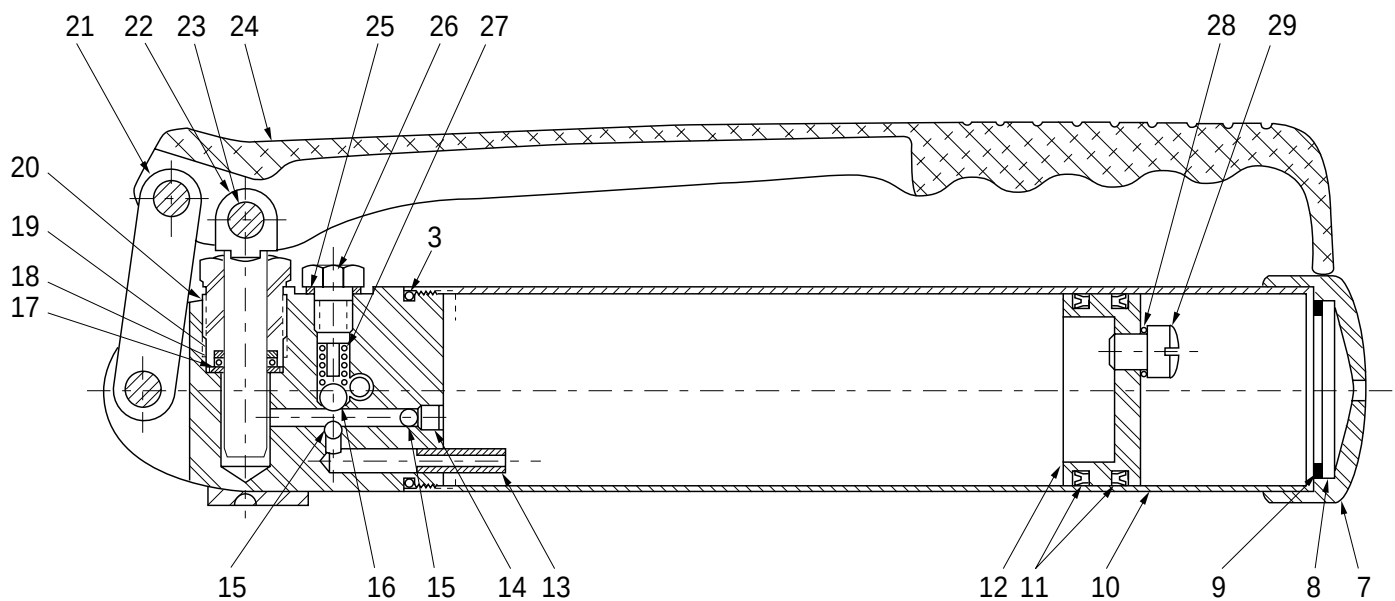
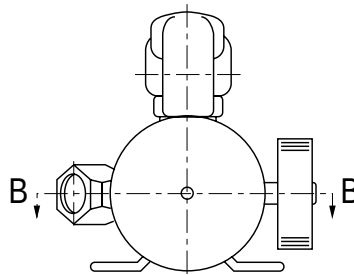
PROBLEM	PROBABLE CAUSE	POSSIBLE REMEDY
Oil leak at coupler.	Fitting loose or damaged. O-ring is worn or damaged.	Tighten or replace fitting and/or coupler. Replace O-ring.
Pump builds pressure, but ram does not advance, or ram will not return.	Coupler is not tightened sufficiently, and check balls are not engaged.	Hand-tighten coupler completely so check balls engage. Replace coupler if necessary.
Oil leak at OPEN/CLOSE release knob.	O-ring is worn or damaged. Release shaft is bent.	Replace O-ring (2). Replace release shaft knob unit (1).
Oil leak at plunger. (Attached to handle.)	O-ring and/or washers are worn or damaged. Injector packing nut is worn.	Replace O-ring (18) and washers (17) and (19). Replace injector packing nut (20).
Oil leak at reservoir end.	V-packing seal is worn or damaged. Cylinder wall damaged.	Replace two V-packing seals (11). Replace reservoir tube (10).
Can't hold load or excessive pumping is required.	Ball in release knob leaking. Discharge ball (16) or intake ball (15) below discharge ball (16) is leaking.	Check seat for scratches or contamination. Reseat ball or return to an authorized Greenlee service center for repair.
Can't raise load with excessive pumping but handle is rigid.	Intake ball (15) below discharge ball (16) is leaking.	Check seat for scratches or contamination. Reseat ball or return to an authorized Greenlee service center for repair.
Load on system causes handle to lift.	Discharge ball (16) is leaking.	Check seat for scratches or contamination. Reseat ball or return to an authorized Greenlee service center for repair.



Exploded View



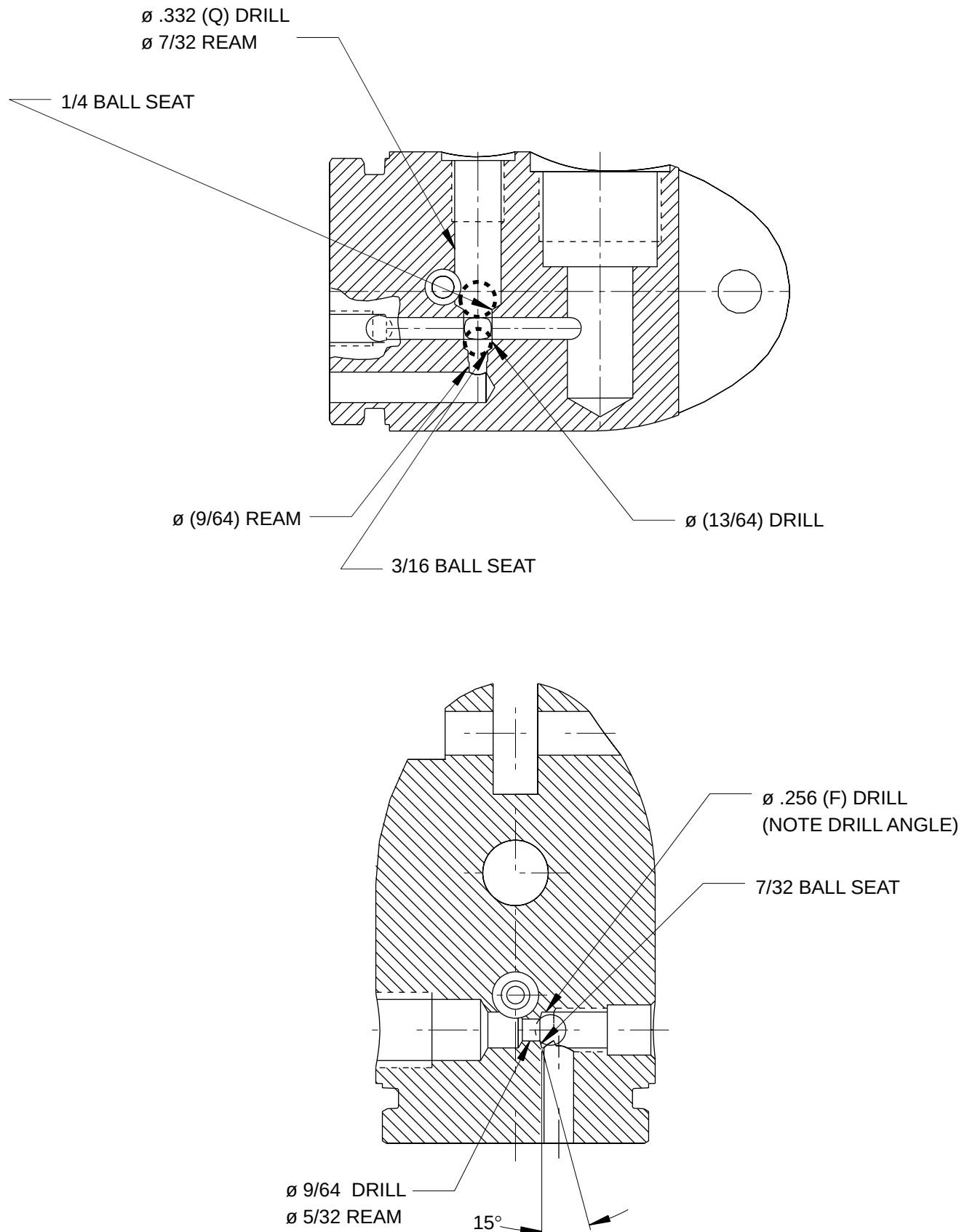
SECTION B-B



SECTION A-A



Pump Block Seat



Parts List

KEY	PART NO.	DESCRIPTION	QTY.
1	502 4520.1	Shaft-Knob Unit, Release (includes Key 2)	1
2	905 0418.6	O-Ring, 1/4" x 3/8" x 1/16"	1
3	905 0408.9	O-Ring, 1-5/8" x 1-7/8" x 1/8" (replaces 905 4750.0**) 1	
4	905 0392.9	Street Ell, 45° x 1/4" Male x 1/4" Female Brass Cadmium Plated ...	1
5	501 3281.4	Block Unit, Pump	1
6	905 0407.0	Pin, 5/16" x 7/8"	1
7	500 3424.3	End-Cap	1
8	500 3422.7	Filter	1
9	905 0744.4	Ring, Retaining	1
10	500 3425.1	Tube, Reservoir	1
11	905 3262.7	V-Packing Seal	2
12	503 0241.8	Follower, Reservoir	1
13	500 3441.3	Tube, Intake	1
14	905 0368.6	Screw, 1/4-20 NC x 1/4" Cup Pt. Skt. Set	1
15	905 0678.2	Ball, 3/16" Dia. GR. #1 Chrome Steel	2
16	905 0679.0	Ball, 1/4" Dia. GR. #1 Chrome Steel	1
17	501 3280.6	Washer, Sealing	1
18	905 0776.2	O-Ring, 7/16" x 5/8" x 3/32" (replaces 905 4749.7**) ..	1
19	501 1286.4	Washer, Teflon	1
20	501 3283.0	Nut, Injector Packing	1
21	500 3164.3	Link, Lever	1
22	500 3165.1	Plunger	1
23	905 0449.6	Pin, 5/16" x 1-1/4"	2
24	501 0001.7	Lever	1
25	500 3177.5	Washer, Valve Screw Sealing	1
26	500 3417.0	Screw, Valve	1
27	500 4102.9	Spring, Compression	1
28	905 0418.6	O-Ring, 1/4" x 3/8" x 1/16"	1
29	905 0558.1	Screw, 5/16-18 NC x 1/2" Fillister Head Machine	1
OPTIONAL			
	501 3800.6*	Packing Repair Kit 55D01 to 61BG01 (not shown)	1
	503 0242.6	Packing Repair Kit 61BG01 and Later (not shown)	1
	905 1059.3	Oil, Light Hyd. (not shown)	1 gal.
	905 0806.8	Oil, Light Hyd. (not shown)	1 qt.
	500 0247.3	Decal, Identification/Safety	1

* When using this Kit, the Follower 500 3336.0 must be replaced with 503 0241.8, as the 905 0731.2 "V" Packing has been replaced by 905 3262.7 "V" Packing and cannot be interchanged.

** Fluorocarbon O-Rings used at factory as part of production process.



Greenlee Tools, Inc.

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