POWER TEAM
HYDRAULIC TECHNOLOGIES

Hydraulic Technologies
5885 11th Street
Rockford, IL 61109-3699 USA

Tech. Services: (800) 477-8326
Fax: (800) 765-8326
Order Entry: (800) 541-1418
Fax: (800) 288-7031

Internet Address:
http://www.powerteam.com

Form No. 1000093

Operating Instructions and Parts List for:

Model 60A & Model 60AFT

Model 60A & Model 60AFT HYDRAULIC COMPRESSORS

INTRODUCTION

This portable compressor is designed for the installation of electrical compression fittings either in the shop or in the field. The compressor develops 60 tons of force at 10,200 psi (70.2MPa) operating pressure.

The compressor can be operated in any position. To operate in the air, remove ground stand and suspend press from bail hook.

PUMP REQUIREMENTS

Any pump with a fluid reservoir capacity greater than 50 cubic inches and a relief valve setting between 10,000 and 10,400 psi may be used with this compressor.

HYDRAULIC LINES

Hydraulic lines rated for a minimum of 10,000 psi working pressure must be used regardless of mode of operation (Single or Double Acting).

SPECIFICATIONS

Piston Diameter:
4.00 inches (10.16 cm)

Stroke:
1.31 in. (3.32 cm) with dies

Crimping Force:
62.8 U.S. tons at 10,000 PSI (57.0 Metric tons at 689 BAR)

Crimping Capacity:
Stranded code cable, splices and terminals:
250-2000 MCM (126-1,022 mm2) aluminum
300-2000 MCM (151.8-1,012mm2) copper

Oil Type:
Amoco Rykon MV

60A Dimensions:
8.5 x 8.96 x 17.54 inches high
(21.59 x 22.76 x 44.55 cm high)

60AFT Dimensions:
8.5 x 10.19 x 20.97 inches high
(21.59 x 25.88 x 53.26 cm high)

60A WEIGHT
(with ground stand & oil):
56.5 lbs. (25.63 kg)

60AFT WEIGHT
(with ground stand & oil):
60.5 lbs. (27.44 kg)

QUICK-COUPLERS:

Pioneer No. 3050-3 female coupler mates with Pioneer No. 3010-3 male coupler

Litho in USA

IMPORTANT SAFETY INFORMATION

This is the safety alert symbol.

It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death

DANGER

Denotes an imminently hazardous situation which, if not avoided, will result in death or serious injury.

WARNING

Denotes a potentially hazardous situation which, if not avoided, could result in death or serious injury.

CAUTION

Denotes a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.

CAUTION

Caution used without the safety alert symbol indicates a potentially hazardous situation which, if not avoided, may result in property damage.

IMPORTANT

Denotes an operating or service procedure or condition considered essential for expedient and efficient operation and service.

WARNING

It is the operators responsibility to read and understand the following safety statements,

- Only qualified operators should install, operate, adjust, maintain, clean, repair, or transport this machinery.
- Inspect tool before use. Replace any worn or damaged parts. Failure to observe these warnings can result in severe injury or death.

WARNING

Keep hands away from the crimping tool head when crimping.

WARNING To help prevent personal injury,

- Always wear eye protection whenever operating hydraulic equipment.

- Always wear hearing protection as required.

- Operation, repair, or maintenance of hydraulic equipment should be performed by a qualified person who understands the proper function of hydraulic equipment per local directives and standards.
- Hydraulic equipment must be assembled correctly and then checked for proper function before use. Use hydraulic components of the same hydraulic pressure ratings. An appropriate hydraulic pressure gauge is recommended to monitor pressure.

- Never place your hands or other body parts near a hydraulic fluid leak.
- Never use your hands or other body parts to check for a possible leak.

High pressure fluid can be injected under your skin causing serious injury and/or infection.

- Use proper die, connector and cable. Improper combinations can result in an incomplete crimp.

- DO NOT USE FOR HOT LINE WORK
- This tool is not insulated. When using this unit near energized electrical lines, use proper personal protective equipment.

- This tool is designed to operate at 10,000 psi. Lower operating pressure will fail to develop the full tonnage required. Higher operating pressure could cause structural failure and injury to users.

CAUTION

- Do not advance ram without dies inserted.

IMPORTANT

- Properly dispose of all fluids, components, and assemblies at the end of their useful life.
- Hydraulic fluid should be compatible with all hydraulic components.

OPERATING INSTRUCTIONS

CAUTION **DO NOT OPERATE THE COMPRESSOR WITHOUT DIES.**

1. Connect press and hose to pump, making sure quick-couplers are tight. Hose, quick-couplers and pump must be rated for 10,000 PSI (689 BAR) operating pressure.

2. Select proper dies for use on fitting to be compressed. Depress release plunger (3-5575) in top die holder (3-5560) and slide one die half in place. Release plunger and adjust die until it is securely in place. Repeat this step to install bottom die in 3-5559 piston.

3. For 60A, open press by depressing cap locking trigger (3-3587) and rotating 3-3618 cap sub-assembly 90 degrees. For 60AFT, simply rotate cap assembly (4-1622) using handle or eyes.

4. Place fitting to be compressed between uprights of cylinder (3-5558) and against bottom die half.

5. Swing cap assembly back into place. Before operating compressor, make sure that head cap is locked in position, die halves are aligned and accessory is properly seated.

6. Run pump to advance piston. When dies meet, compression is complete. Release pressure at pump to allow piston to retract.

NOTES:

The 60A & 60 AFT can be operated in any position. To operate in the air, remove ground stand and suspend press from bail hook.

The 60A can easily be converted to a 60AFT model using kit no. 3-3632. For details, see “Instructions for converting 60A Press to 60AFT”

PERIODIC MAINTENANCE: Occasionally lubricate release plungers, pivot pins and locking mechanisms to prevent sticking. Use of a molybdenum disulfide grease is recommended.

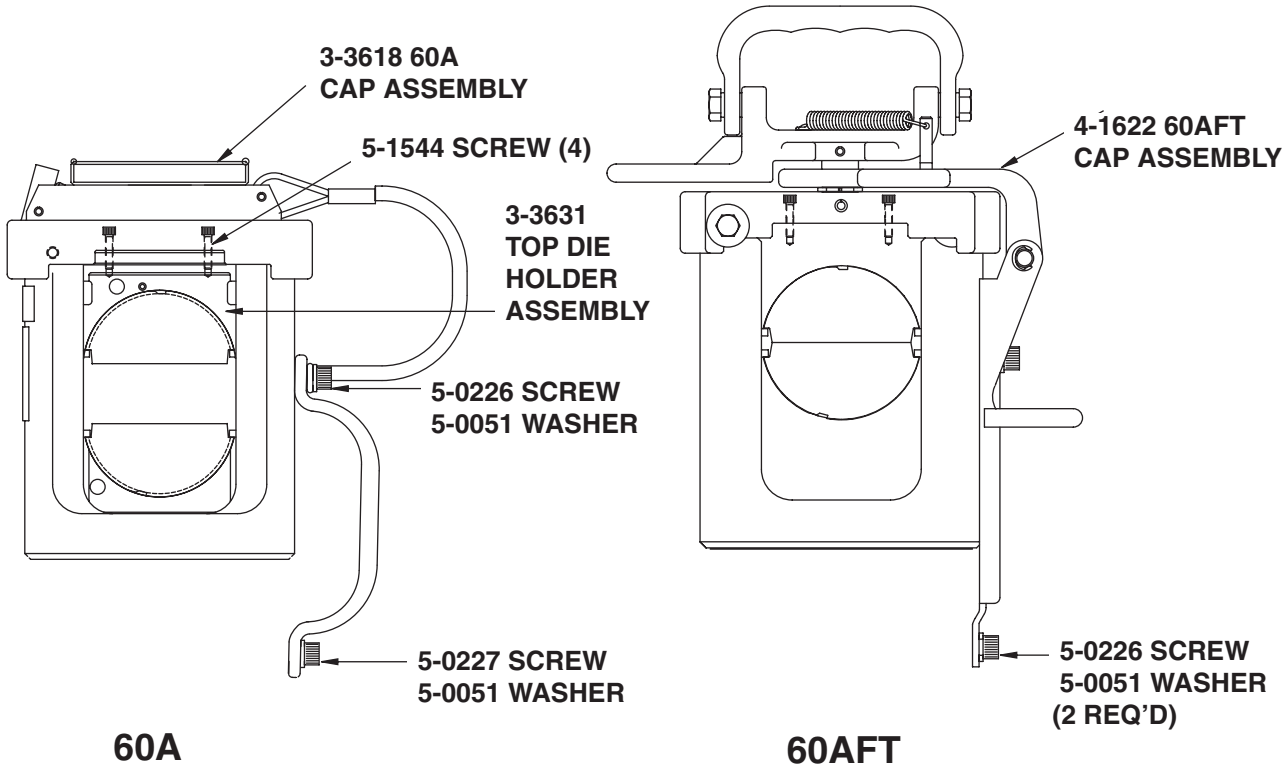
OIL LEAKAGE: A small amount of weepage from the piston is normal and required to keep moving parts lubricated. Excessive leak ages indicate a need for seal replacement, which should be done only by an authorized service center. Seal kit No. 3-3600 is available for seal replacement.

WARNING The compressor is designed to operate at 10,500/10,000 PSI (723/689 BAR). Lower operating pressure will fail to develop the full tonnage required. Higher operating pressure could cause structural failure and injury to users.

BLEEDING AIR FROM COMPRESSOR

Remove ground stand from compressor. Install dies in compressor, attach hose and connect to pump. Suspend press, inverted, by the bail hook at a position below the pump. Advance and retract the piston three times.

By filling and bleeding the compressor with this method, air trapped in the compressor will be transferred to the pump reservoir.



Kit no. 3-3632 is available for converting a 60A press to a 60AFT. To complete conversion:

I. With press in ground stand, remove 5-0226 and 5-0227 capscrews. Discard 5-0227 screw and one 5-0051 washer; set aside 5 -0226 screw and second 5 -0051 washer. Depress cap locking trigger to rotate and remove cap assembly (3-3618) and top die holder assembly (3-3631).

2. Separate top die holder assembly from cap assembly by removing four 5-1544 screws. Discard screws; do not re-use,

3. Position top die holder assembly in groove in 60AFT cap assembly (4-1622) so that die release button will align with die release button in piston. Secure top die holder assembly with four new 5-1544 screws from kit. Screws can be inserted and tightened without removing handle or hinge. Set assembly aside.

4. Remove press from ground stand and invert, supporting the unit on cylinder uprights. Clean cylinder and pressure connection block (3-5561) to prevent contamination.

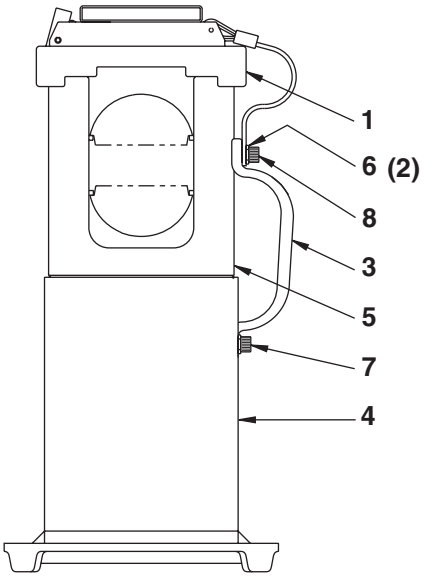
5, Remove the two outside capscrews (5-0232) on connection block. Note the o-ring (5-0092) between block and cylinder. Rotate block 180 degrees on clean mating surfaces so quick-coupler (5-0010) is facing away from press. Replace capscrews using Loctite 290 in accordance with manufacturer's instructions; torque 30lbs. /ft.

6. Upright compressor in ground stand. Place 60AFT cap assembly and die holder assembly between cylinder uprights and rotate to secure in position. Bracket should be on same side of cylinder as original 60A handle.

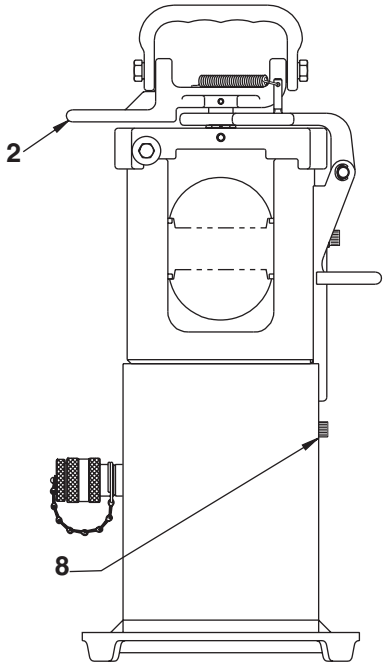
7. Attach top part of bracket using 5-0226 screw and 5 -0051 removed from 60A press. Secure bottom

8. Bleed air from press. Refer to instructions for "Bleeding Air from Compressor."

PARTS LIST

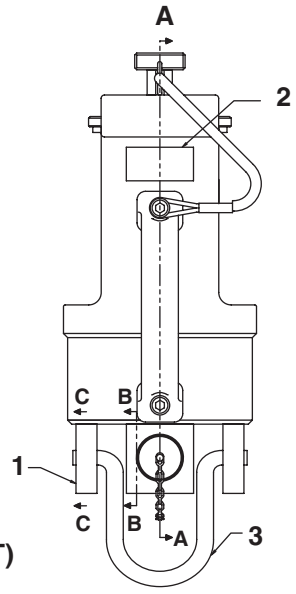


60A

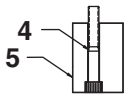


60AFT

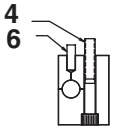
Item No.	Part No.	No. Req'd	Description
1	**3-3618**	1	Cap Assembly 60A
2	**4-1622**	1	Cap Assembly 60AFT
3	**3-4095**	1	Handle (60A only)
4	**3-4100**	1	Stand, Ground
5	**3-5558**	1	Cylinder, 60-Ton
6	**10248**	2	Washer
7	**5-0226**	1	Screw, SHC
8	**5-0227**	1	Screw, SHC



(60A shown, parts common to 60AFT)



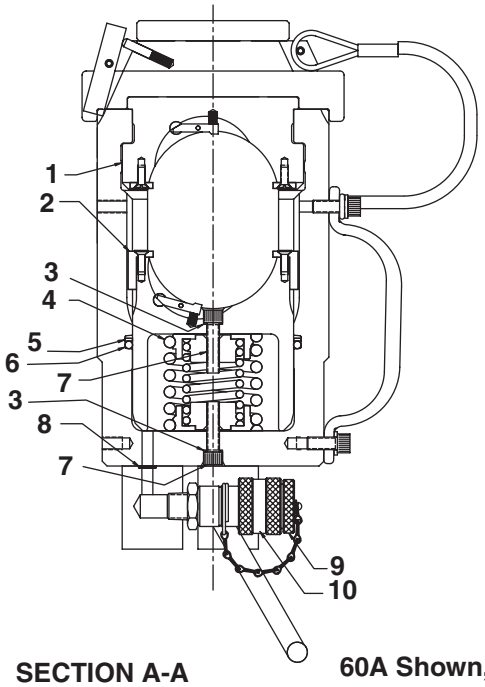
SECTION B-B



SECTION C-C

Item No.	Part No.	No. Req'd	Description
1	**3-5562**	1	Hook Pivot Block
2	**420691**	1	Decal, Product Blank
3	**3-3615**	1	Hook
4	**5-0232**	4	Screw
5	**3-5561**	1	Block, Pressure Conn.
6	**10716**	1	Pin, Roll

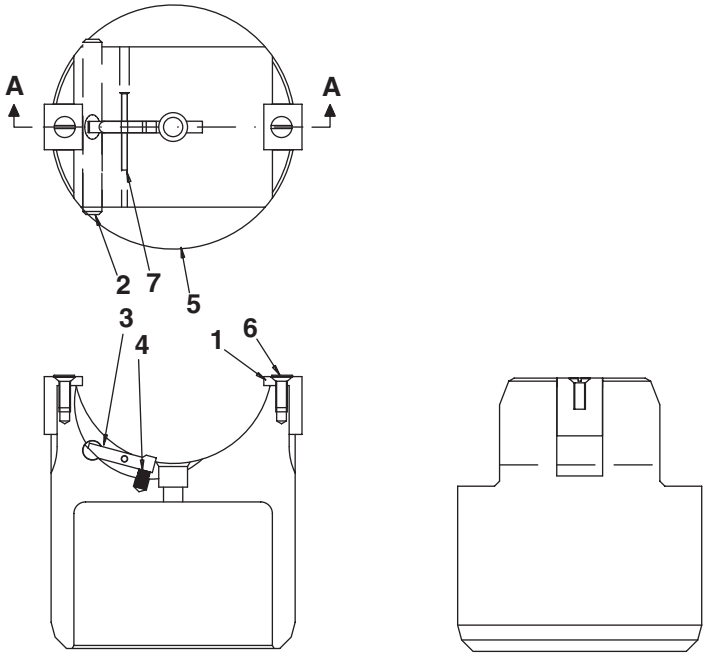
PARTS LIST



SECTION A-A

60A Shown, Parts Common to 60AFT

Item No.	Part No.	No. Req'd	Description
1	**3-3631**	1	Holder Assembly Top Die
2	**3-3572**	1	Ram Assembly 60 Ton
3	**3-6796**	2	Washer
4	**3-3574**	1	Spring Assembly 60 Ton
5	**5-2094**	1	Ring, Backup
6	**5-2096**	1	O-Ring
7	**5-0228**	2	Screw, SHC
8	**5-0092**	1	O-Ring
9	**9797**	1	Plug, Dust
9	**9796**	1	Coupler, Female

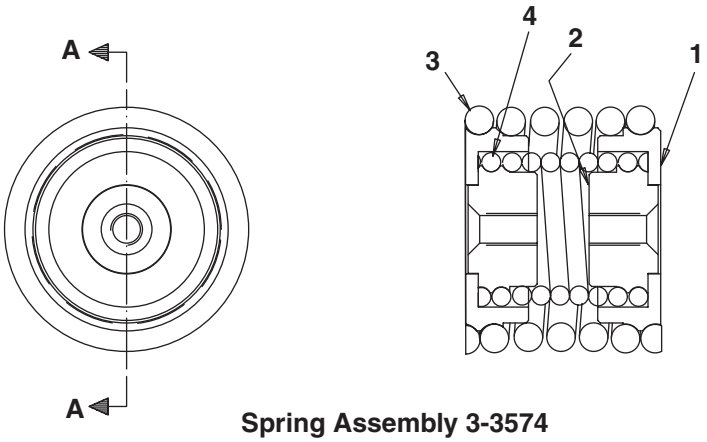


Ram Assembly 3-3572

SECTION A-A

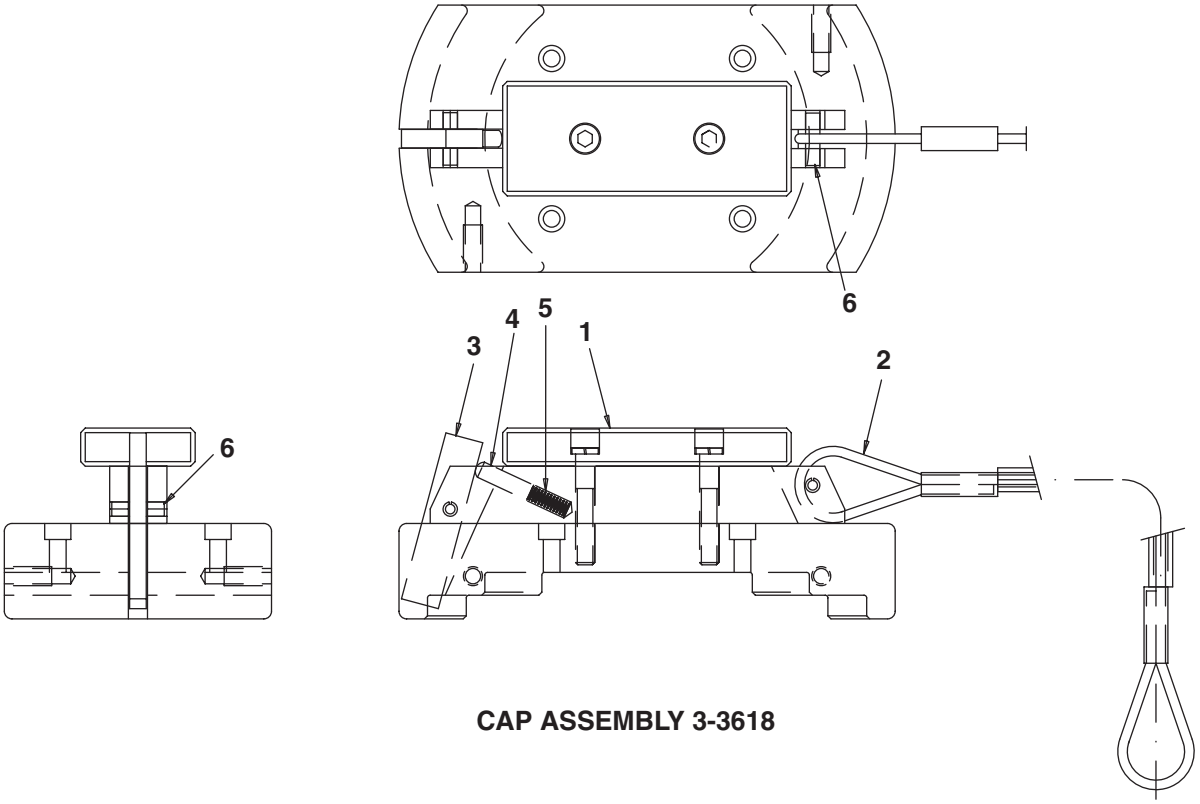
Item No.	Part No.	No. Req'd	Description
1	**3-2722**	2	Retainer, Bottom Die
2	**3-3575**	1	Shaft, Release
3	**3-3583**	1	Finger, Locking
4	**3-3584**	1	Spring, Compression
5	**3-5559**	1	Body, Ram
6	**5-0094**	2	Screw
7	**5-2738**	1	Pin

PARTS LIST



Spring Assembly 3-3574

Item No.	Part No.	No. Req'd	Description
1	**3-3591**	2	Retainer, Outer Spring
2	**3-3592**	2	Retainer, Inner Spring
3	**3-3593**	1	Spring, Outer Tension
4	**3-3594**	1	Spring, Inner Tension

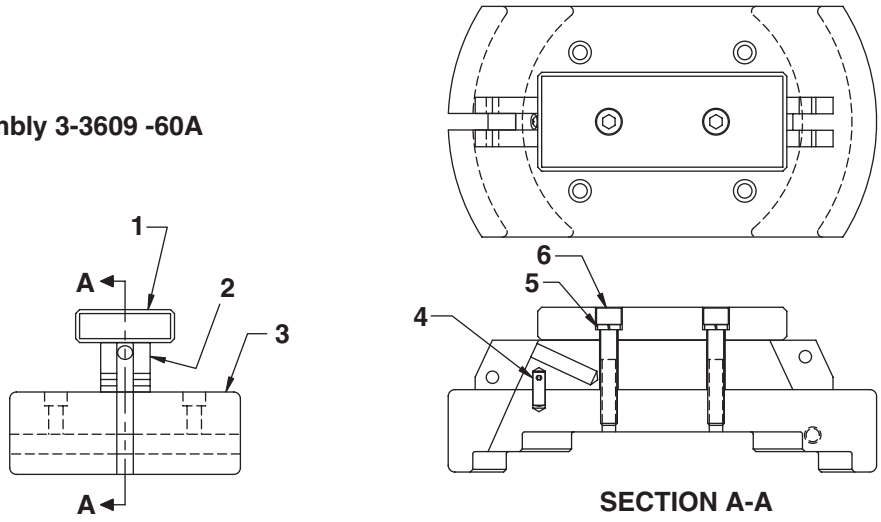


CAP ASSEMBLY 3-3618

Item No.	Part No.	No. Req'd	Description
1	**3-3609**	1	Sub-Assembly, Cap
2	**3-2787**	1	Cable Assembly
3	**3-3587**	1	Trigger, 60-Ton
4	**3-3590**	1	Plunger, Spring
5	**3-1369**	1	Spring, Compression
6	**5-2097**	2	Pin, Roll

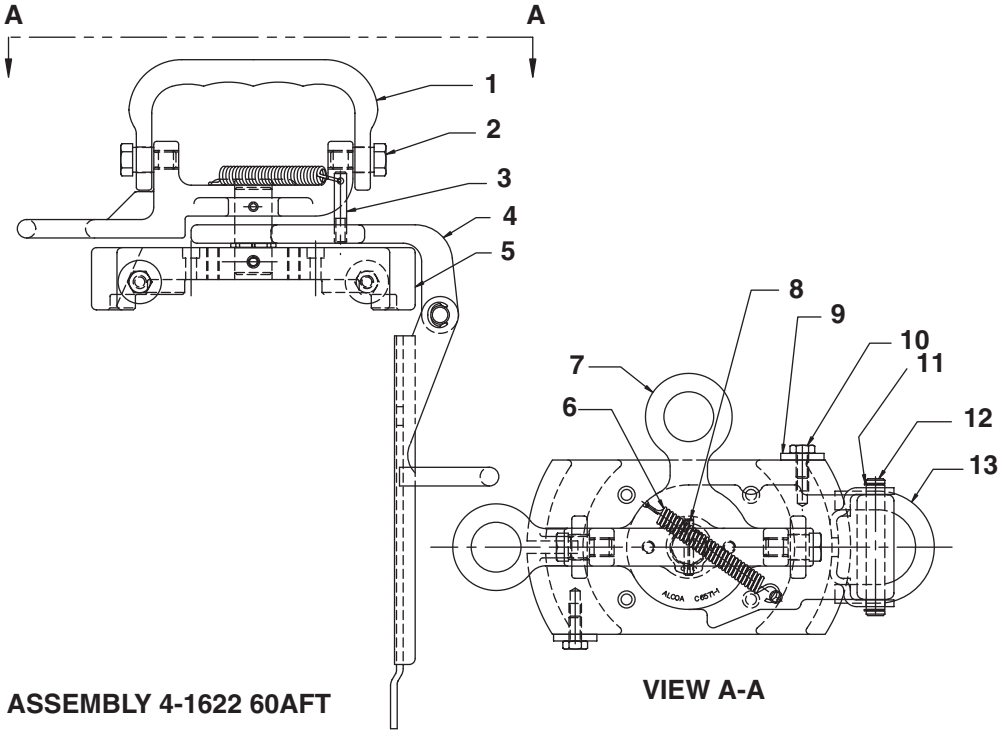
PARTS LIST

Cap Sub-Assembly 3-3609 -60A



SECTION A-A

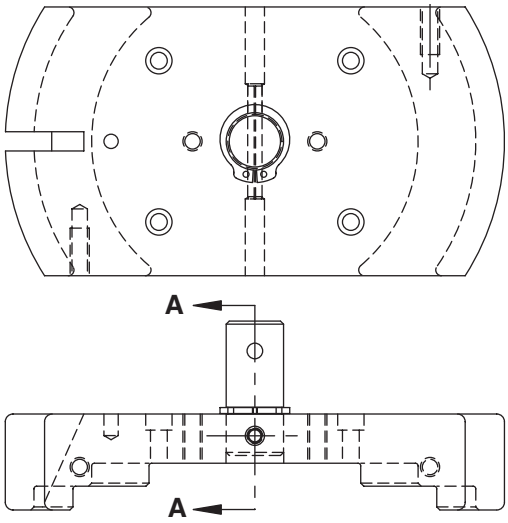
Item No.	Part No.	No. Req'd	Description
1	**3-6001**	1	Handle, Cap
2	**3-6002**	1	Spacer, Handle
3	**3-5555**	1	Base, Cap
4	**5-1604**	2	Pin
5	**5-1258**	1	Lockwasher
6	**10022**	2	Screw

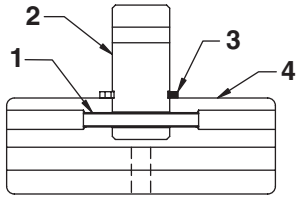


CAP ASSEMBLY 4-1622 60AFT **VIEW A-A**

Item No.	Part No.	No. Req'd	Description
1	**3-3623**	1	Handle
2	**3-3622**	2	Bolt, Shoulder
3	**3-3625**	1	Stud, Spring
4	**3-3626**	1	Hinge
5	**3-3620**	1	Cap Assembly, 60 AFT
6	**3-3624**	1	Spring
7	**3-3621**	1	Base, Handle
8	**5-2102**	1	Pin, Roll
9	**3-3629**	2	Washer
10	**10005**	2	Screw
11	**5-2103**	2	Ring, Retaining
12	**3-3630**	1	Pin, Hinge
13	**3-4262**	1	Bracket Assembly, Lift

PARTS LIST

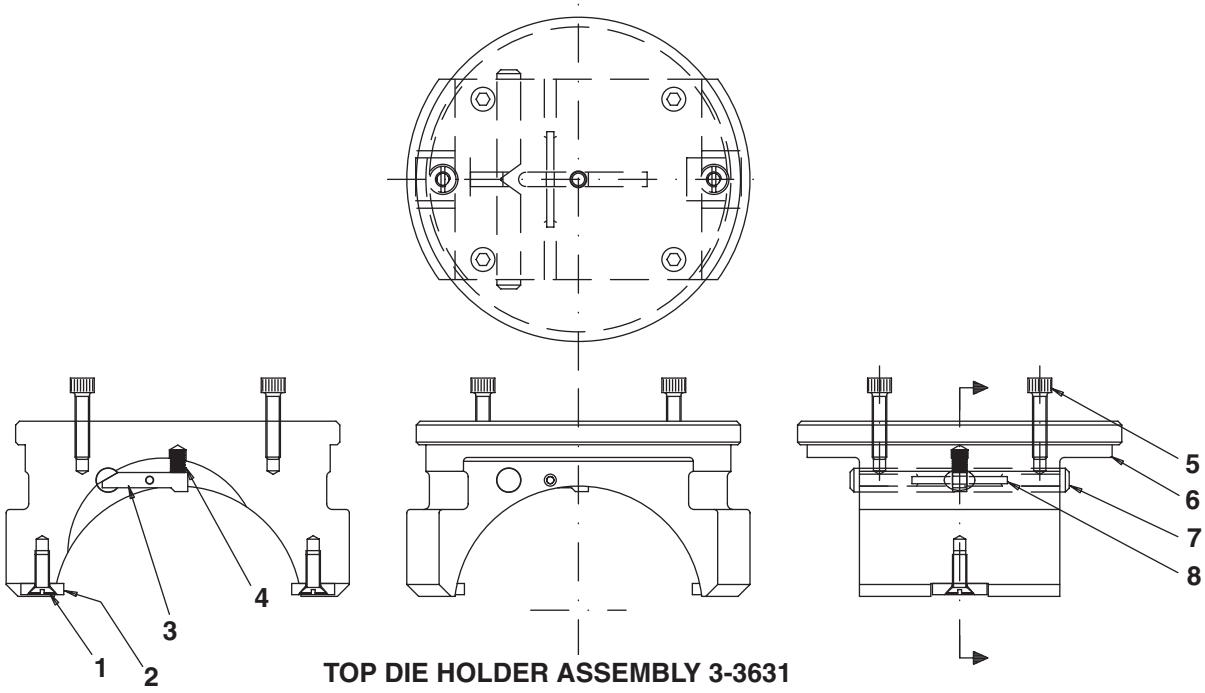




SECTION A-A

Cap Sub-Assembly 3-3620 -60AFT

Item No.	Part No.	No. Req'd	Description
1	**12298**	1	Pin, Roll
2	**3-5557**	1	Post, Pivot
3	**5-2702**	1	Ring, Retaining
4	**3-5555**	1	Base, Cap



TOP DIE HOLDER ASSEMBLY 3-3631

Item No.	Part No.	No. Req'd	Description
1	**5-0094**	2	Screw
2	**3-2723**	2	Retainer, Top Die
3	**3-3583**	1	Finger, Locking
4	**3-3584**	1	Spring, Compression
5	**5-1544**	4	Screw
6	**3-5560**	1	Body, Holder
7	**3-3575**	1	Shaft, Release
8	**5-2738**	1	Pin

NOTES