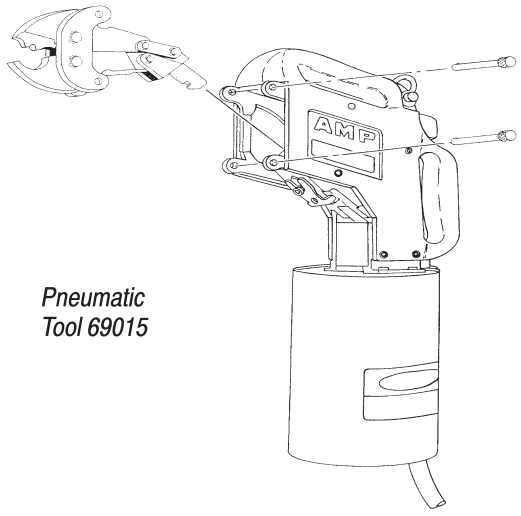
Pneumatic Tool 69015



Pneumatic Tool 69015

Figure 1

1. INTRODUCTION

This instruction sheet provides information on tool installation, product application, and maintenance and inspection procedures for Pneumatic Tool 69015. See Figure 1.

This tool is used to crimp:

- SOLISTRAND* terminals, flag terminals, butt splices, parallel splices, on solid or stranded copper wire sizes 8 thru 1/0. Refer to Instruction Sheet 408–1311.
- STRATO–THERM* heat resistant uninsulated terminals on solid or stranded copper wire sizes 8 thru 1/0. Refer to Instruction Sheet 408–1311.
- COPALUM* terminals and splices on solid or stranded aluminum or copper wire sizes 8 thru 4. Refer to Instruction Sheet 408–2425.
- COPALUM terminals and splices on 8 thru 6 film insulated solid aluminum or copper wire or stranded copper wire. Refer to Instruction Sheet 408–2433.
- AMPOWER* terminals and splices on solid or stranded copper wire size 2.
- PLASTI–GRIP* terminals on solid or stranded copper wire size 6.
- AMPLI–BOND* terminals on stranded copper wire size 6.

Basic instructions on the use of this crimping tool are provided in Section 2, INSTRUCTIONS. Section 3 contains maintenance and inspection procedures.

NOTE

All numerical values are in metric units [with U.S. customary units in brackets]. Dimensions are in millimeters [and inches]. Unless otherwise specified, dimensions have a tolerance of ±0.13 mm [±.005 in.] and angles have a tolerance of ±2°. Figures and illustrations are for identification only and are not drawn to scale.

Reasons for reissue of this instruction sheet are provided in Section 5, REVISION SUMMARY.

1.1. Specifications

Air Pressure – 586.1 min–689.5 kPa max [85 min–100 psi max]

Air Displacement – 721,000 mm^3 [44 $in.^3$]

Weight – Approx. 9 kg [20 lbs] with head installed

Maximum amount of tools on one air system – (2)

1.2. Air Line Requirements

Use clean, dry, oil treated air, regulated between 586.1–689.5 kPa [85–100 psi].

CAUTION

It is important that air pressure is maintained constantly between 586.1–689.5 kPa [85–100 psi]. Pressure under586.1 kPa [85 psi] will be insufficient for crimping operation. Pressure over 689.5 kPa [100 psi] may cause damage to the tool.

A filter and moisture separator, regulator, and lubricator, (supplied by the customer) must be used with this tool to ensure dependable performance and long life. Tyco Electronics strongly recommends the units be installed at each tool station in the order shown in Figure 2. Mount the units as close as possible to the tool, preferably where the tool hose is connected to the air system. Be sure the units are checked regularly, on an assigned schedule, by the tool operator or maintenance personnel. Figure 2 lists the suggested manufacturers and benefits realized by the use of this equipment.

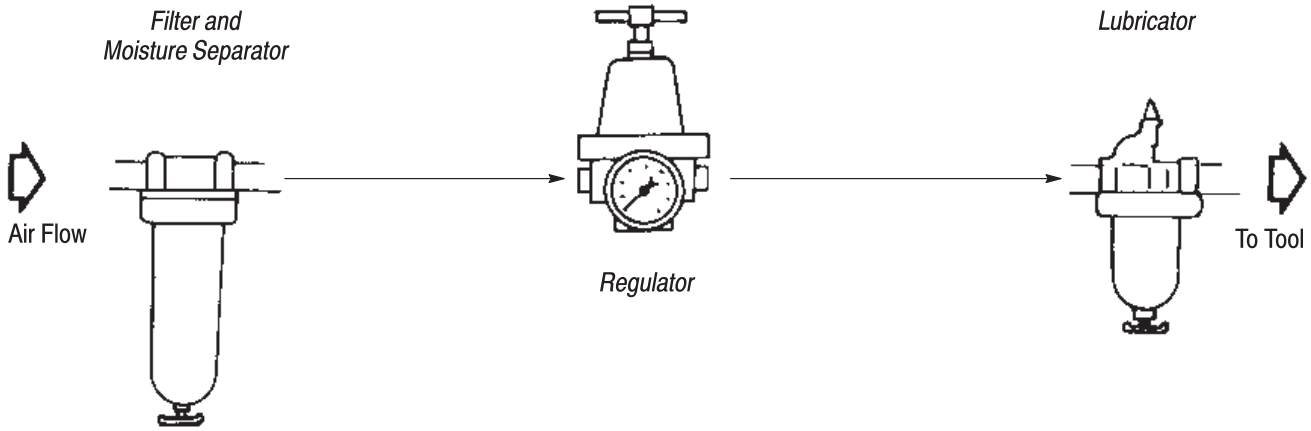
Air Pressure Check List

Check air pressure right at tool station while tool is operating.

(a) If air pressure is below 586.1 kPa [85 psi]:

1. Check air pressure and air line pressure regulators for proper settings and mechanical condition.

2. Check for clogged or “kinked” air lines or hoses.



DRAIN REGULARLY	CHECK AIR PRESSURE REGULARLY (586.1–689.5 kPa [85–100 psi]	CHECK OIL LEVEL REGULARLY (Adjust to Very Fine Mist)
Minimizes Clogging and Excessive Wear	Assures Smooth Consistent Tool Performance	Eliminates Sluggish or Sticking Valves and Pistons
Minimizes Rust and Corrosion		Provides Protective Film for Highly Polished or Close Tolerance Surfaces
Prevents Water from Washing Away Lubricants	Protects Hoses and Tool Components from Damage	Provides Seal in Close Tolerance Areas
Prevents Water Emission from Exhaust Ports		Extends Life of Pistons, Cylinders, and Valves

SUGGESTED MANUFACTURERS		
FILTER/MOISTURE SEPARATOR, REGULATOR, LUBRICATOR		**LUBRICATOR OIL**
C.A. NORGREN CO. LITTLETON, COLORADO	CHICAGO PNEUMATIC TOOL CO. NEW YORK, N.Y.	C.P. AIROILENE SAE NO. 10 CHICAGO PNEUMATIC TOOL CO. NEW YORK, N.Y.

Figure 2

3. Check air lines, hoses, fittings, or couplings for correct size. (May be too small.)

4. Check air compressor for sufficient capacity and mechanical condition.

(b) If air pressure is above 689.5 kPa [100 psi]:

Check air compressor and air line pressure regulators for proper settings and mechanical condition.

1.3. Air Hose Installation

The air hose is removed and packaged with the tool for shipment.

1. Blow air through hose to remove any foreign particles before connecting the hose to the tool.
2. Remove the plastic cap from the fitting at the bottom of the tool and connect the hose.

1.4. Tool/Balance Reel Installation

A. Tool/Work Area Orientation

The tool is equipped with a hanger as shown in Figure 3. Use the hanger tp suspend and operate the tool in any desired direction.

When using the tool over a work bench, or at an assembly line, always locate the tool and balance reel within easy reach of the operator. The tool should be able to be moved easily within the full working area of the operator. Refer to Figure 3.

NOTE

Longer hose lengths are available upon request. Call the Tooling Assistance Center number at the bottom of page 1 or contact your local Tyco Electronics Representative for more information.

B. Balance Reel

The balance reel, see Figure 3, should be capable of suspending a tool weight of 9 kg [20 lbs] or more. Install the balance reel so that the tool can easily be moved within the full working area of the operator. Avoid operator fatigue by adjusting the balance so that the operator need exert only a minimum effort to move the tool in any direction.

Depending on the portable usage of the tool, varying amounts of slack cable may be required. Tyco Electronics suggests purchasing an adjustable balance reel equipped with a locking feature. The locking feature should be able to be disengaged in the event that the unit is to be used as a conventional balance.

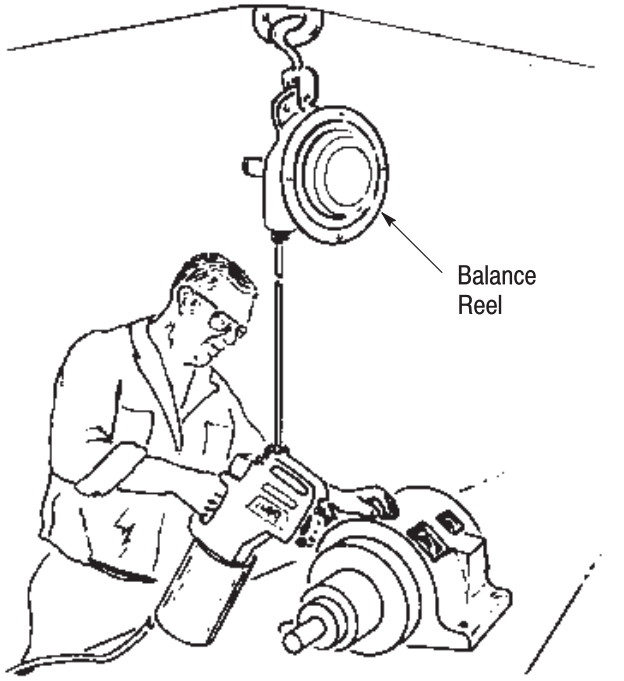


Figure 3

1.5. Safety Precautions

As with most tooling, certain precautions must be taken by the operator and repairman to avoid personal injury or damage to the tool. Carefully observe the following safety precautions before and during operation of the tool:

DANGER *ALWAYS disconnect the air supply when changing crimping heads or performing any maintenance on the tool.*

DANGER *ALWAYS keep fingers clear of the crimping head jaws when operating the tool.*

DANGER *NEVER allow the air pressure to exceed 689.5 kPa [100 psi].*

CAUTION *ALWAYS ensure that the correct type and size terminals or splices are used in the crimping jaws.*

CAUTION *ALWAYS ensure that the crimping head assembly pins are fully inserted.*

CAUTION *NEVER operate the tool without the crimping head installed or damage to the tool may occur.*

2. INSTRUCTIONS

DANGER *Avoid personal injury. ALWAYS keep fingers clear or the crimping jaws when actuating the air tool. Do NOT operate the tool without having the head installed and latched in place.*

2.1. Crimping Head installation

1. Disconnect the tool from the air supply.

2. Remove the assembly pins from the mounting lugs as shown in Figure 4.

3. Pull the toggle arm forward. Insert the crimping head toggle lever all the way into the hole in the toggle arm until the toggle lever snaps in place. See Figure 4.

4. Align the holes in the crimping head links with the holes in the mounting lugs.

5. Insert the assembly pins.

6. Connect the tool to the air supply 586.1–689.5 kPa [85–100 psi].

7. The tool is now ready for operation.

CAUTION *Be sure the assembly pins are fully inserted or damage to the tool or pins will occur.*

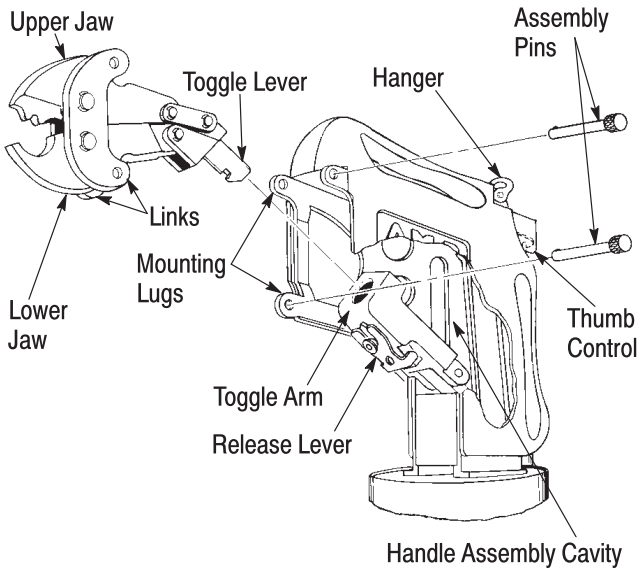


Figure 4

2.2. Crimping Head Removal

1. Disconnect the tool from the air supply.
2. Remove the assembly pins.
3. Lower the head away from the mounting lugs, twist head 90° and remove from toggle arm.
4. Reinstall the assembly pins.

2.3. Crimping Procedure

The following crimping procedures are general information only. Refer to the instruction material packaged with the crimping heads for specific wire preparation, crimping procedures and crimp inspection instructions.

DANGER

Avoid personal injury. When operating the air tool, exercise caution while holding the terminals, splices, or wire near the crimping area.

NOTE

Air pressure must be at 655 kPa [95 psi] min when crimping 1/0 wire size.

1. Insert a stripped wire into the terminal or splice as instructed in the instruction sheet packaged with the crimping head.
2. Place the terminal or splice in the crimping jaws as instructed in the instruction sheet packaged with the crimping head.
3. Hold the terminal or splice in place, press the thumb control and hold it down until the crimping stroke is completed. Release the thumb control and remove the crimped terminal or splice.

3. MAINTENANCE AND INSPECTION PROCEDURE

It is important that a maintenance and inspection procedure be performed at regular intervals to ensure efficient dependable performance of the tool. The maintenance and inspection program consists of cleaning, visual inspection, and lubrication.

DANGER

Avoid personal injury or damage to the tool. ALWAYS disconnect the air supply before performing cleaning, lubrication, or parts replacement.

Frequency of inspection is dependent on:

- The care, amount of use, and handling of the tool.
- The type and size of the products crimped.
- The degree of operator skill.
- The presence of abnormal amounts of dust and dirt.

3.1. Cleaning (Daily)

Remove debris from cavity (See Figure 4) of handle assembly. Tool may be wiped clean with solvent and a clean cloth.

3.2. Visual Inspection (Monthly) (See Figure 5)

Perform the following visual inspections of the tool at least once a month. If parts need replaced, refer to Section 4, REPLACEMENT PARTS, for parts identification and replacement part numbers.

- Inspect tool for bent mounting lugs or assembly pins.
- Inspect all moving parts for excessive wear or metal particles. The presence of metal particles indicates a need for lubrication and/or misaligned or worn parts.
- Check tightness of all screws and nuts.
- Inspect for proper lubrication.

3.3. Lubrication (Figure 5)

It is important that the tool is lubricated at regular intervals to ensure minimum wear and dependable service. The following symbols are used to indicate the areas to be lubricated and the type of lubricant to be used. Refer to Figure 5.

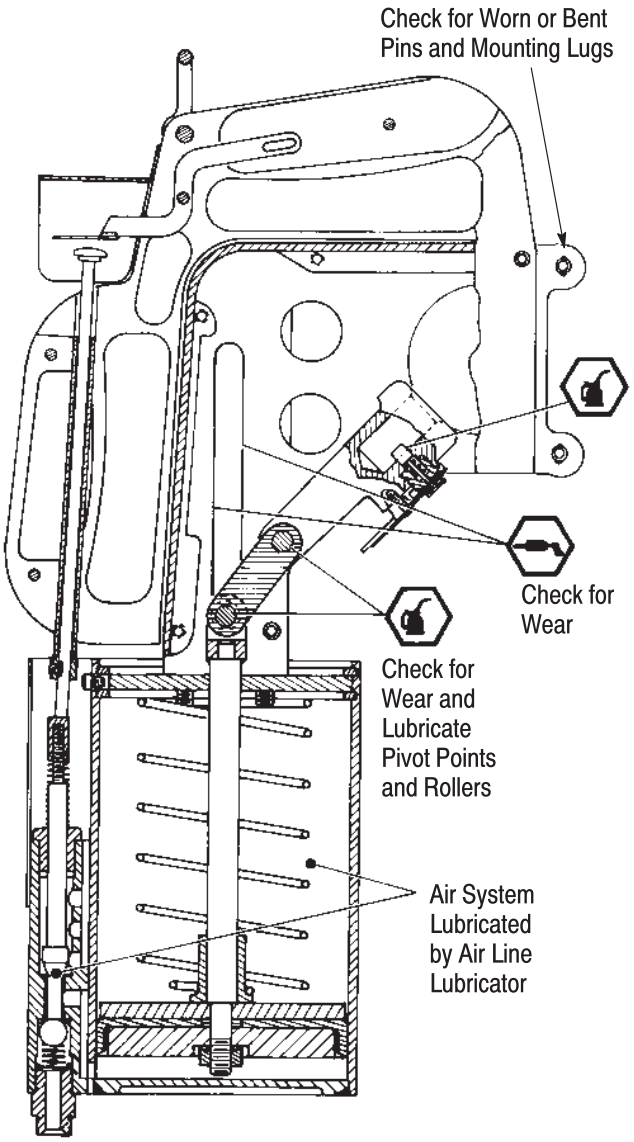


Figure 5

SAE No. 20 Non–Detergent Motor Oil

Light Multi–Purpose Grease

CAUTION

Apply lubricant sparingly, thereby avoiding "build–up" of lubricant, dirt, and possible tool malfunction.

The air system of the tool must receive lubrication via an air line lubricator. Refer to Paragraph 1.2.

Frequency of lubrication should be as follows:

- Tools used in daily production – Lubricate daily
- Tools used daily (occasional) – Lubricate weekly
- Tools used weekly – Lubricate monthly

4. REPLACEMENT PARTS

Customer–replaceable parts are listed in Figure 6. A complete inventory can be stocked and controlled to prevent lost time when replacement of parts is necessary. Order replacement parts through your Tyco Electronics Representative, or call 1–800–526–5142, or send a facsimile of your purchase order to 1–717–986–7605, or write to:

CUSTOMER SERVICE (38–35)
TYCO ELECTRONICS CORPORATION
P.O. BOX 3608
HARRISBURG, PA 17105–3608

Tools may also be returned to Tyco Electronics for evaluation and repair. For tool repair service, contact a Tyco Electronics Representative at 1–800–526–5136.

5. REVISION SUMMARY

- Updated document to corporate requirements
- Deleted obsolete document in Section 1, INTRODUCTION

ITEM	PART NUMBER	DESCRIPTION	QTY
1	300094	HOSE, Air	1
2	304439	LABEL, Danger	1
3	3–21016–4	SCREW	2
4	21001–2	SCREW	4
5	2–21000–7	SCREW	8
7	2–21000–5	SCREW	2
8	300003	NAMEPLATE	1
9	1–305678–9	RIVET	2
10	306209–6	PIN	2
12	300056	NUT, Serrated	5
13	59085	SIDE–GRIP, Left	1
14	3–305927–1	SCREW	1
15	300088	HANGER	1
16	21019–1	NUT, Hex	1
17	301449	NAMEPLATE	1
18	21017–2	SCREW, Drive	2
19	300070	TRIGGER, Rod Assembly	1
20	2–21000–8	SCREW	1
21	59084	SIDE–GRIP, Right	1
22	48522	GUARD	1
23	2–21000–9	SCREW	2
24	300074	TUBE, Trigger Guide	1
25	3–21010–9	SCREW, Set	1
26	300075	STOP, Collar	1
27	3–305927–0	SCREW	1
28	300080	CAP, Adjustment	1
29	21018–6	NUT, Hex	1
30	300081	SPRING, Valve – Outside	1
31	300623	NUT, Gland	1
32	300087	GUARD, Valve	1
33	300625	PLUNGER, Valve	1
34	300083	WASHER, Ball Seat	1
35	300084	RING, Retaining	1
36	23241–8	BALL, Steel	1
37	300086	SPRING, Valve – Inside	1

ITEM	PART NUMBER	DESCRIPTION	QTY
38	300093	COUPLING, Hose	1
39	300100	CUP, Packing	1
40	300065	PLATE, Follower	1
41	48224	SHELL ASSEMBLY, Cylinder	1
42	21021–6	NUT, Hex	1
44	21899–4	WASHER	1
45	300303	SPACER	2
46	300064	PLATE, Backing	1
47	300062	STOP, Piston	1
48	49970	SPRING, Piston	1
49	300059	ROD ASSEMBLY, Piston	1
50	300099	RING, Retaining	2
51	300058	PLATE, Cylinder Head	1
52	21045–8	RING, Retaining	4
53	300044	PIN	1
54	300057	ROLLER	2
55	300098	SPACER	1
56	304496	PIN	1
57	300068	LINK, Piston	1
58	300043	PIN	1
59	302821	ARM, Toggle	1
61	307871–1	GUARD	1
62	300050	TRIGGER ASSEMBLY, Back	1
64	3–21000–3	SCREW	1
65	307497–1	PLATE, Side–Subassembly	1
66	6–21000–7	SCREW	1
67	300989	PLATE, Side – Subassembly	1
68	8–22280–2	SPRING, Retaining Pin	1
69	300994	HOUSING, Retaining Pin	1
70	300993	WASHER, Retaining Pin	1
71	2–21002–4	SCREW	1
72	302838	LEVER, Pin Release	1

Figure 6 (cont'd)

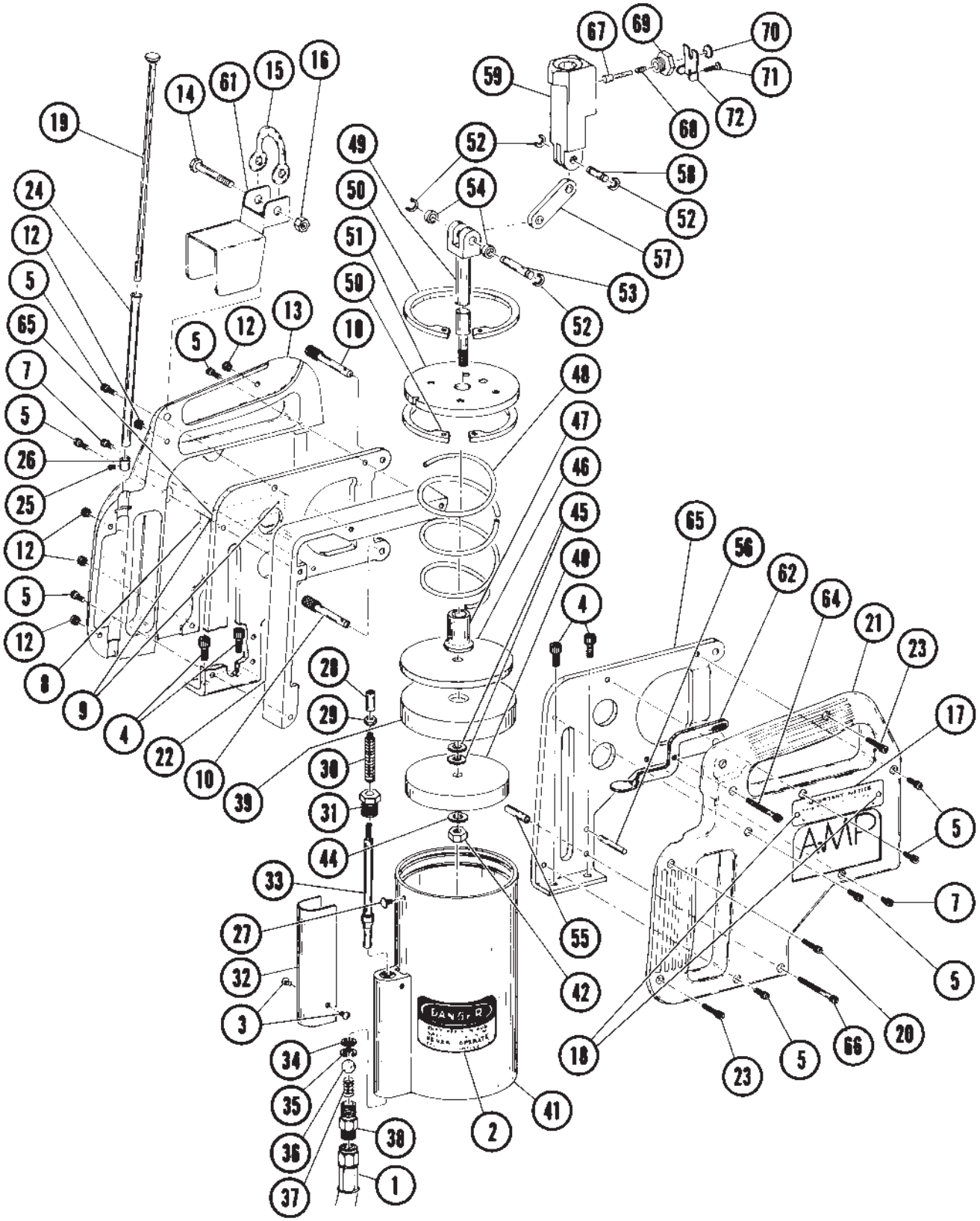


Figure 6 (end)