

AMPAMP INCORPORATED
HARRISBURG, PA 17105

AMP*

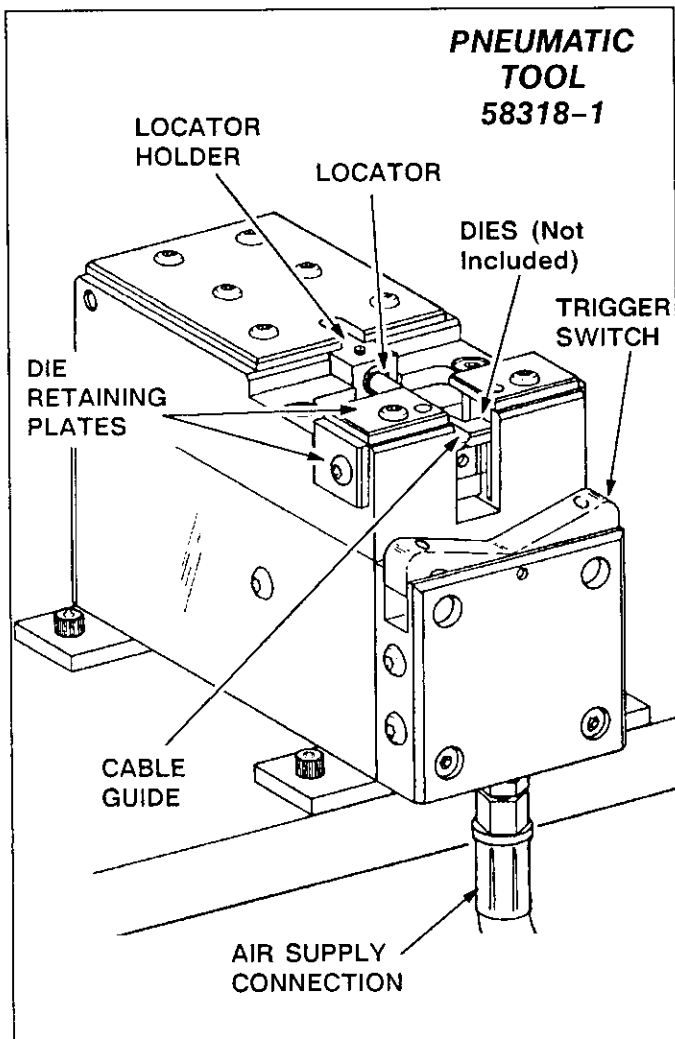
PNEUMATIC TOOL 58318-1
FOR SEMI-RIGID CABLE TERMINATIONS**IS 9351**CUSTOMER HOTLINE
1 800 722-1111RELEASED
1-10-91

Fig. 1

1. INTRODUCTION

This instruction sheet (IS) covers application and maintenance of AMP Pneumatic Tool 58318-1. The tool crimps the connectors listed in Figure 2 to .086 and .141 diameter semi-rigid cable.

NOTE

All dimensions in this document are in inches.

2. DESCRIPTION (Figure 1)

The tool is a semi-automatic bench unit requiring an air supply delivering a constant pressure of between 80 psi and 100 psi.

CAUTION

Air pressure below 80 psi will not provide the needed crimp force. Pressure over 100 psi may damage the tool.

Important tool features and functions include:

- a reversible cable guide,
- a two-way trigger switch, designated "O" on one end to indicate the die opening function, and "C" on the other to indicate the closed (crimp) function,
- a set of separately purchased staker dies—die sets vary according to product and cable being crimped (See Figure 2),
- die retaining plates at the top and sides of the tool front,
- a locator holder, and
- a product locator—two Plug/Jack locators are supplied and a locator for Right-Angle Plugs may be purchased separately.

3. PREPARATION FOR CRIMPING (Figure 2)

Select connector. Choose and install the appropriate locator and die set, and properly orient the cable guide, all as described in the following procedures.

Prepare cable using AMP Semi-Rigid Cable Stripping Machine No. 22021 1-2 with Stripping Kit No. 813599-[] (CM 2909), or prepare cable by hand using AMP Cable Preparation Kit No. 59981-1 (IS 6788). Cable should meet the requirements of AMP Application Specification 114-24000.

4. TOOL SETUP PROCEDURES**A. Die Installation (Figure 3)**

Each die set includes two dies (one for each side of the tool) and four springs (two per die).

1. Remove all four die retaining plates.
2. Insert springs into dies.
3. Slide spring-loaded dies into their positions in the tool.
4. Replace die retaining plates, making sure that the springs are seated squarely against the side plates, and that screws are tight.

CONNECTOR TYPE	AMP COMMERCIAL PART NO.	CATEGORY B		CATEGORY F		DIES	LOCATOR
		MILITARY M3901/	AMP EQUIVALENT	MILITARY M39012/	AMP EQUIVALENT		
CONNECTORS FOR .141 CABLE (RG-402)							
SMA Series Plug with Center Contact	228634-2	79-3104	227743-1	79-3308	228634-1	313720-1	308075-2
SMA Series Plug with Center Contact and Safety Wire Holes	228634-4	79-3004	228634-3	79-3208	228634-3	313720-1	308075-2
SMA Series Sealed Plug with Center Contact	221328-1	--	--	--	--	313720-1	308075-2
SMA Series Sealed Plug with Center Contact and Safety Wire Holes	221328-2	--	--	--	--	313720-1	308075-2
SMA Series Plug without Center Contact	228635-2	92-3101	227531-1	92-3301	228635-1	313720-1	220241-1
SMA Series Plug without Center Contact and with Safety Wire Holes	228635-4	92-3001	221329-2	92-3201	228435-3	313720-1	220241-1
SMA Series Sealed Plug without Center Contact	221320-1	--	--	--	--	313720-1	313584-1
SMA Series Sealed Plug without Center Contact and with Safety Wire Holes	221329-2	--	--	--	--	313720-1	313584-1
SMA Series Plug with Retractable Collar	227531-5 227531-6	--	--	--	--	313721-1	220241-1
SMA Series Sealed Plug with Retractable Collar	221329-3	--	--	--	--	313721-1	313584-1
SMA Series Sealed Plug with Retractable Collar and with Safety Wire Holes	221329-4	--	--	--	--	313721-1	313584-1
SMA Series Right-Angle Plug	228626-2	--	--	80-3308	228626-1	313720-1	59966-1
SMA Series Right-Angle Plug with Safety Wire Holes	228626-4	--	--	80-3208	228626-3	313720-1	59966-1
SMA Series Sealed Right-Angle Plug	222066-1	--	--	--	--	313720-1	59966-1
SMA Series Sealed Right-Angle Plug with Safety Wire Holes	222066-2	--	--	--	--	313720-1	59966-1
SMA Series Jack	228636-2	81-3004	227744-1	81-3208	228636-1	313720-1	308075-2
SMA Series Four-Hole Panel Jack	228637-2	82-3004	227745-1	82-3208	228638-1	313720-1	308075-2
SMA Series Two-Hole Panel Jack	221676-1	--	--	--	--	313720-1	308075-2
SMA Series Bulkhead Jack	228638-2	83-3004	227746-1 227746-3	83-3208	228638-1	313720-1	308075-2
SMA Series Adapter	228077-3	--	--	--	--	313720-1	220241-1
N Series Front-Mounted Jack	228448-1	--	--	--	--	313720-1	220241-1
N Series Rear-Mounted Jack	228658-1	--	--	--	--	313720-1	220241-1
N Series Plug	228440-1 228440-2	--	--	--	--	313720-1	220241-1
N Series Adapter	228446-1	--	--	--	--	313720-1	220241-1
TNC Series Front-Mounted Jack	228456-1	--	--	--	--	313720-1	220241-1
TNC Series Rear-Mounted Jack	229502-1	--	--	--	--	313720-1	220241-1
TNC Series Plug	228179-1 228179-2	--	--	--	--	313720-1	220241-1

Fig. 2 (continued next page)

CONNECTOR TYPE	AMP COMMERCIAL PART NO.	CATEGORY B		CATEGORY F		DIES	LOCATOR
		MILITARY M3901/	AMP EQUIVALENT	MILITARY M39012/	AMP EQUIVALENT		
CONNECTORS FOR .086 CABLE (RG-405)							
SMA Series Plug with Center Contact	228639-2	79-3103	227868-1	79-3307	228639-1	313719-1	308075-2
SMA Series Plug with Center Contact and Wire Safety Holes	228639-4	79-3003	227868-3	79-3207	228639-3	313719-1	308075-2
SMA Series Short Plug with Center Contact	221447-1 221447-2	--	--	--	--	313719-1	313123-1
SMA Series Short Plug with Center Contact and Safety Wire Holes	221447-3 221447-4	--	--	--	--	313719-1	313123-1
SMA Series Sealed Short Plug	221812-1	--	--	--	--	313719-1	313123-1
SMA Series Sealed Short Plug with Safety Wire Holes	221812-2	--	--	--	--	313719-1	313123-1
SMA Series Short Plug with Retractable Collar	221447-5	--	--	--	--	313719-1	313123-1
SMA Series Right-Angle Plug	228583-2	--	--	80-3307	228583-1	313719-1	59966-1
SMA Series Right-Angle Plug with Safety Wire Holes	228583-4	--	--	80-3207	228583-3	313719-1	59966-1
SMA Series Sealed Right-Angle Plug	222264-1	--	--	--	--	313719-1	59966-1
SMA Series Sealed Right-Angle Plug with Safety Wire Holes	222264-2	--	--	--	--	313719-1	59966-1
SMA Series Jack	228640-2	81-3003	227869-1	81-3207	228640-1	313719-1	308075-2
SMA Series Four-Hole Panel Jack	228641-2	82-3003	227870-1	82-3207	223641-1	313719-1	308075-2
SMA Series Two-Hole Panel Jack	221666-1	--	--	--	--	313719-1	308075-2
SMA Series Bulkhead Jack	227871-3 228642-2	83-3003	227871-1	83-3207	228642-1	313719-1	308075-2
SMA Series Adapter	228505-1	--	--	--	--	313719-1	308075-2
TNC Series Rear-Mounted Jack	228507-1	--	--	--	--	313719-1	308075-2
TNC Series Plug	228179-4	--	--	--	--	313719-1	308075-2

Fig. 2 (end)

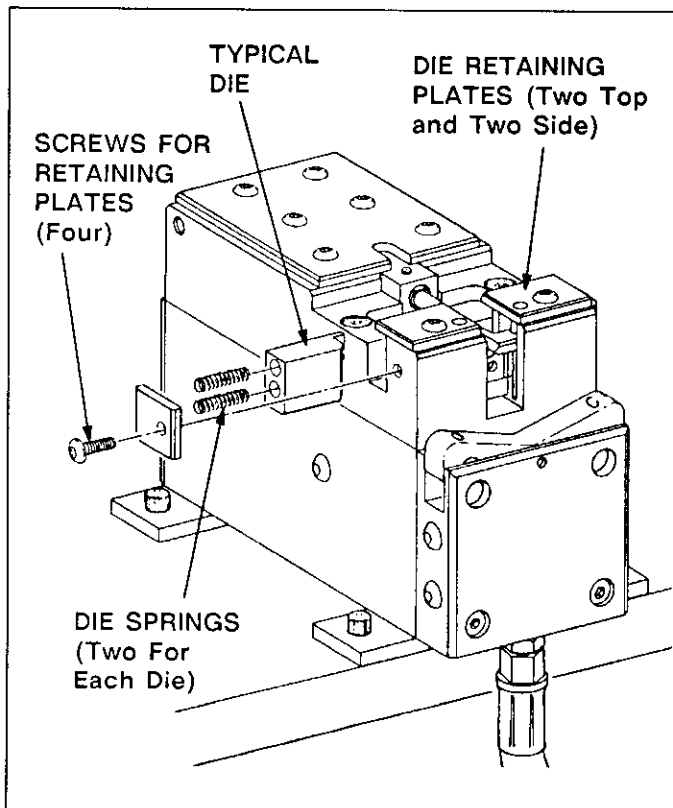


Fig. 3

B. Locator Installation (Figure 4)

Before installing a locator, be sure you know whether the jack end or plug end will need to be facing forward. The locator for right-angle plugs can only be installed in one direction. Also, be sure that the tool is connected to the air supply.

1. Press the "O" side of the trigger switch to open the dies and retract the locator holder. Hold the switch in the open position.
2. Using a 1/16 hex wrench, turn the trigger holding screw at least two full turns in a counter-clockwise direction. Switch should remain in the down position with the dies open.

DANGER Avoid Personal Injury! Dies and locator holder will close if air pressure is lost. Use small pliers or other holding device to insert locator into holder.

3. Insert the locator into the locator holder, flat side up, with the end you wish to use facing the front of the tool. Make certain that the locator bottoms in the holder.
4. Tighten the setscrew on top of the locator holder.

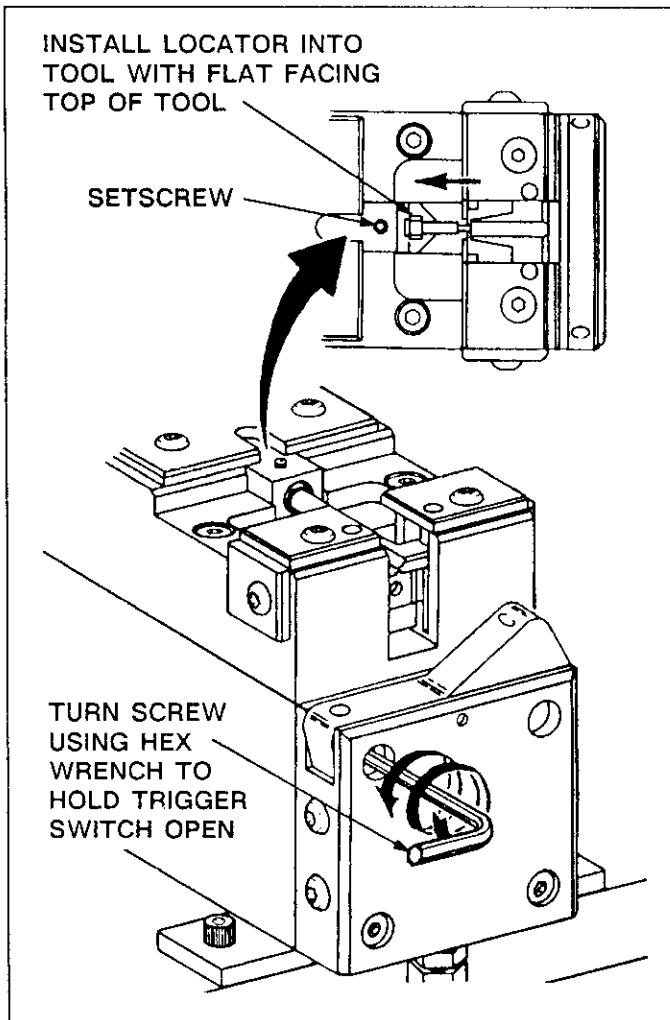


Fig. 4

5. Hold down the "O" side of the trigger switch, turn the trigger holding screw clockwise until tight. Release the switch.

C. Cable Guide Installation (Figure 5)

One side of the reversible cable guide is for .086 cable and the other is for .141 cable. To change sides:

1. Remove all four die retaining plates, being careful not to lose the die springs.
2. Slide dies (if installed) slightly toward the tool sides.
3. Lift the guide and turn it to its other side, keeping the front of the guide oriented toward the front of the tool, and reseat guide in tool.
4. Slide dies to their positions in the tool.
5. Replace die retaining plates, making sure that the springs are seated squarely against the side plates, and that screws are tight.

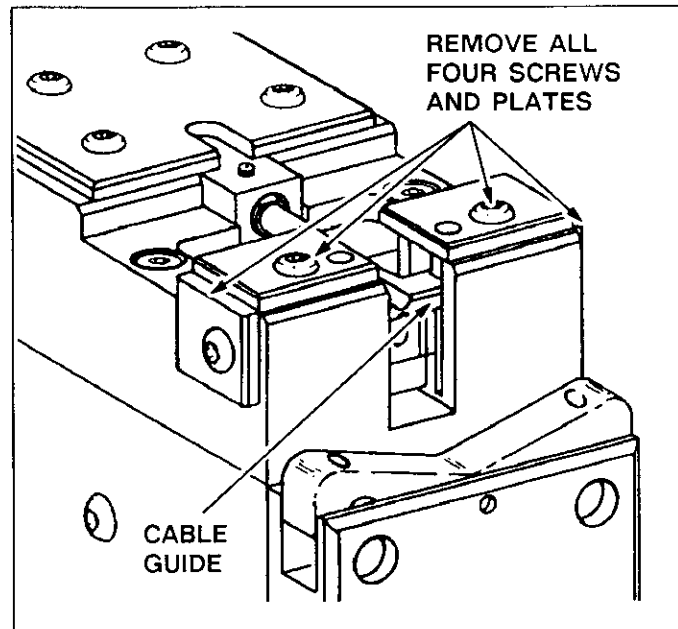


Fig. 5

5. APPLICATION PROCEDURES

Assemble desired connector to the appropriate cable, flange end first, according to the instructions packaged with the product. Make sure cable is completely bottomed inside connector body, unless instructions say otherwise. Apply as follows:

1. Press the "O" side of the trigger switch to open the dies. Hold the switch down through step 3.
2. Locate the connector against the product locator of the tool.
 - a. Jack connectors must be seated over the locator end.
 - b. Plug connectors and adaptors must be seated so that the cable center conductor or product center contact is inserted in the locator hole.
 - c. If the product has a retractable collar (coupling nut) it must be moved along the cable until clear of the tool.
 - d. Right-angle connectors must be seated with the product recess against the locator and the collar end facing the top of the tool.
3. Rest the cable in the groove of the cable guide, and apply light pressure on cable in the direction of the locator.
4. Release the trigger switch, advancing the locator to crimp position and closing dies around the cable.
5. Press the "C" side of the trigger switch to crimp product to cable.

6. Release the trigger switch, then press the "O" side to open dies. Remove applied product. Inspect application using instructions packaged with product.

6. TOOL INSPECTION AND MAINTENANCE

The procedures described in this section have been established to ensure the quality and reliability of AMP tools.

DANGER

Avoid Personal Injury! Disconnect air supply before performing maintenance, inspections or repairs.

It is recommended that the tool be inspected when you receive it and at regularly scheduled intervals.

6.1. Daily Maintenance

Clean foreign particles from tool using a soft, clean, lint-free cloth or brush. Make sure all pins, retaining rings, and screws are secured in their proper places. Coat all pins, pivot points and bearing surfaces with a thin coat of any good SAE No. 20 motor oil. Do not oil excessively. Store tool in a clean, dry area when it is not in use.

6.2. Periodic Inspection

Regularly scheduled inspections should be conducted and recorded by quality control personnel. AMP Incorporated recommends that the inspection procedures that follow be performed once a month; more often if your work environment, company standards, or amount of tool use indicates the need:

1. Remove all four die retaining plates, then both dies. Be sure to put the plate hardware and die springs in a safe place so they are not lost.

2. Remove all lubrication and accumulated film from dies by immersing them in a commercial degreaser.

3. Carefully inspect the dies for worn, cracked, pitted, or chipped die surfaces, and for other obvious wear or damage. Any of these conditions will require replacement of the dies (See Section 7).

4. Visually check tool for missing or damaged parts, paying special attention to pins, screws, retaining rings, and surfaces that contact moving parts. Replace parts as necessary.

5. Re-assemble tool. See Section 4 for installation of dies and retaining plates.

7. REPAIRS

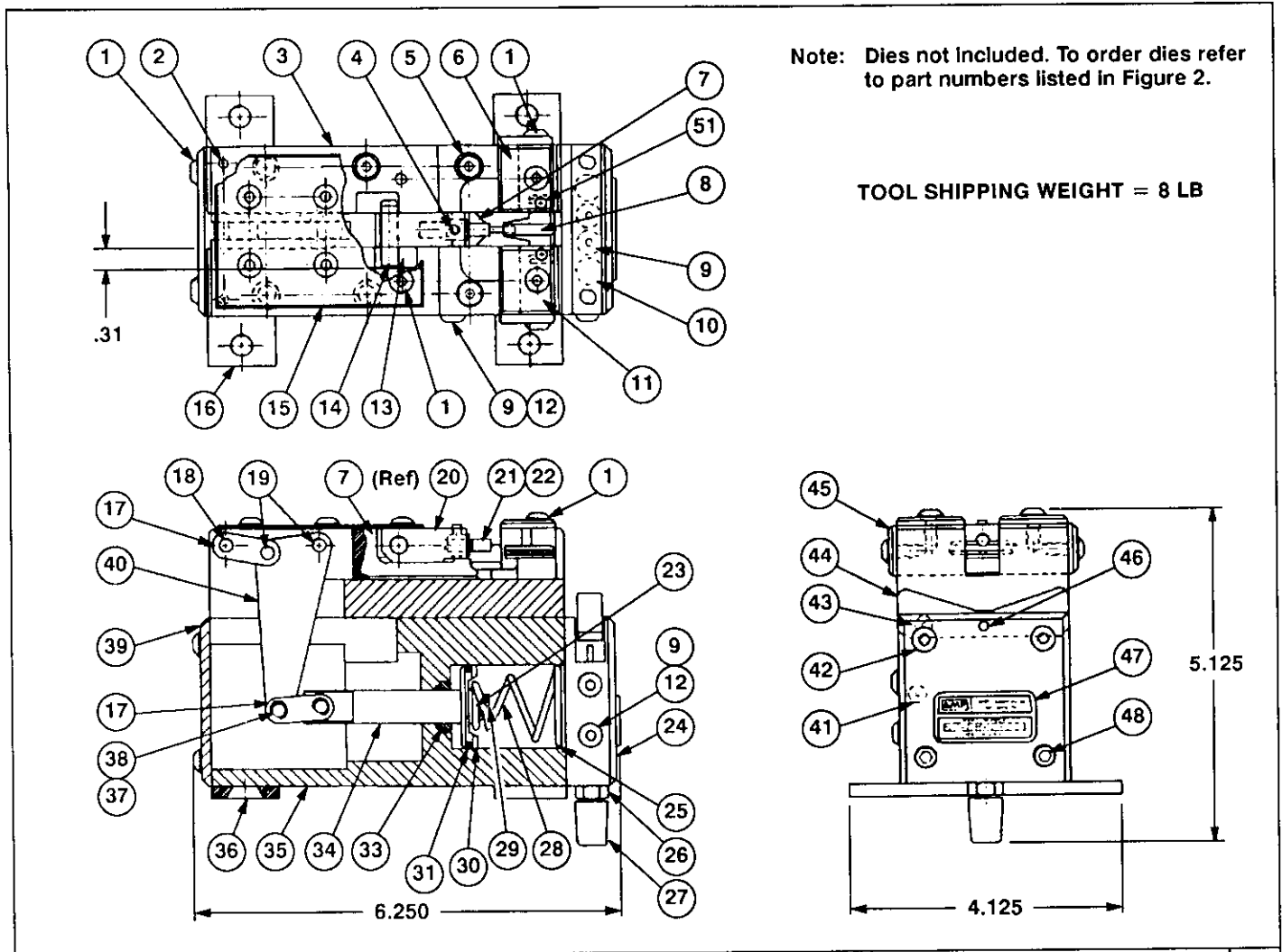
A complete inventory of customer replaceable parts, listed in Figure 6, should be stocked to allow immediate replacement. To stock an inventory, order using the following address:

CUSTOMER SERVICE (38-35)
AMP INCORPORATED
P.O. BOX 3608
HARRISBURG, PA 17105-3608

or order parts from the wholly owned AMP subsidiary where the tool was purchased.

The entire tool may be returned for evaluation and repair, along with a written description of the problem, to:

CUSTOMER REPAIR (01-12)
AMP INCORPORATED
1523 NORTH 4TH STREET
HARRISBURG, PA 17102-1604



ITEM	PART NO.	DESCRIPTION	QTY	ITEM	PART NO.	DESCRIPTION	QTY
1	6- 21002-2	10-24 x .38 Button Head Screw	14	26	24161-1	Adapter	1
2	5- 21028-1	.125 Dia x .50 Slotted Pin	2	27	303785	Plastic Cap	1
3	313723-1	Body	1	28	59684-7	Spring	1
4	2- 21010-8	6-32 x .19 Setscrew	1	29	21001-2	1/4-20 x .50 Socket Head Screw	1
5	21001-7	1/4-20 x 1.25 Socket Head Screw	6	30	308080-1	Piston	1
6	313727-1	Right Die Retaining Plate	1	31	7- 21090-2	1.75 OD x .125 O-Ring	1
7	313724-1	Ram	1	33	5- 21084-0	.688 OD x .094 O-Ring	1
8	313726-1	Cable Guide	1	34	308074-1	Piston Rod	1
9	6- 21002-1	10-24 x .25 Button head Screw	5	35	308061-1	Cylinder	1
10	27174-1	Three-Way Poppet Valve Cartridge	2	36	3- 21003-6	1/4-20 x .50 Flat Head Screw	4
11	313728-1	Left Die Retaining Plate	1	37	303675	Retaining Pin	2
12	23194-3	Fitting Gasket	3	38	21045-3	Retaining Ring	4
13	9- 22281-0	Spring	1	39	308078-1	Cylinder Cover	1
14	2- 21030-4	.250 Dia x 1.000 Dowel Pin	1	40	308068-1	Lever	1
15	308072-2	Cover	1	41	3- 21086-9	.250 OD x .062 O-Ring	1
16	308076-1	Mounting Pad	2	42	6- 21002-3	10-24 x .50 Button Head Screw	2
17	1- 59645-5	Link	4	43	1- 21003-3	4-40 x .25 Flat Head Screw	1
18	1- 21030-7	.190 Dia x 1.500 Dowel Pin	1	44	308077-1	Trigger Switch	1
19	3- 59559-4	Pivot Pin	2	45	308073-1	Side Die Retaining Plate	2
20	313725-1	Locator Holder	1	46	5- 21028-4	.12 Dia x .688 Slotted Pin	1
21▲	220241-1	Locator	1	47■	25625-2	Identification Plate	1
22▲	308075-2	Locator	1	48	5- 21000-6	10-24 x .88 Socket Head Screw	2
23	21055-8	Flat Washer	1	50	38111	Hose Assembly (Not Shown)	1
24	308064-1	Valve Body	1	51	313722-1	Pin	2
25	2- 21086-4	1.875 OD x .062 O-Ring	1				

▲ Item 21 is shipped positioned in locator holder, Item 22 is separate but included.
 ■ Attach Item 47 per AMP Specification 118-37. Locate approximately in position shown.

Fig. 6 (end)