

Figure 1

1. INTRODUCTION

AMP* Modular Plug Adapter 318510-1 is designed to accept various modular plug hand tool dies for use with AMP 626 Pneumatic Tooling Assemblies. The pneumatic tooling assemblies and crimping die assemblies are sold separately and are available from AMP Incorporated. For information concerning the setup and operation of the pneumatic tools, refer to Customer Manual 409-5862.

This instruction sheet provides:

- Installation and removal of the modular plug adapter from the tool holder assembly.
- Die installation and removal from the modular plug adapter.
- Maintenance, inspection, and repair information for the modular plug adapter.

For information on the crimping die assemblies concerning wire preparation, crimping procedures, maintenance, inspection, and repair, refer to the associated instructions supplied with the crimping die assembly.

Read these instructions thoroughly before proceeding.

NOTE

Measurements are in metric units [followed by U.S. customary units in brackets].

Reasons for reissue are provided in Section 8, REVISION SUMMARY.

2. DESCRIPTION (Figure 1)

The modular plug adapter facilitates the use of various crimping die assemblies and connects to the tool holder assembly of the pneumatic tool to provide the necessary straight line motion of the crimping dies when the pneumatic tool is actuated. When actuated, a cam extends through the tool holder into the crimper, contacting an internal spring-loaded die holder mechanism. The other end of this mechanism is directly connected to the movable die and, as the cam pushes against the mechanism, the movable die moves in a straight line and bottoms against the stationary die. When the cam of the pneumatic tool retracts, the force is removed from the movable die and the spring-loaded mechanism returns to its starting position.

The die may also be opened and closed manually by use of the plastic slide switch, which is coupled to the movable die and the spring-loaded mechanism via a screw. The slide switch therefore permits opening and closing of the dies for insertion and removal of the terminals or splices.

3. INSTALLATION AND REMOVAL OF MODULAR PLUG ADAPTER (Figure 1)

Before installing the modular plug adapter, refer to customer manual 409-5862 for instructions on installing the appropriate tool holder assembly (including cam) on the pneumatic tool. After the appropriate tool holder assembly has been installed, proceed as follows:

NOTE Removal is the reverse of installation.

DANGER To prevent personal injury, ALWAYS disconnect the main air supply and electrical supply (if applicable) of the pneumatic tool before installing or removing the modular plug adapter.

DANGER DO NOT operate pneumatic tool without the modular plug adapter and the proper die assembly installed. After the modular plug adapter is installed, make sure that the quick pins are FULLY tightened to avoid personal injury and damage to the tool.

1. Remove quick pins from tool holder assembly. Refer to Figure 1.
2. Slide the modular plug adapter into tool holder assembly, aligning the threaded holes on the adapter with the threaded quick pin holes on the holder.
3. After adapter is properly aligned in the tool holder assembly, insert and tighten the quick pins.

NOTE AMP recommends using Loctite† No. 242 removable threadlock, or equivalent, to prevent the quick pins from loosening.

4. DIE INSTALLATION AND REMOVAL (Figures 2 and 3)

NOTE Removal is the reverse of installation.

DANGER To prevent personal injury, ALWAYS disconnect the main air supply and electrical supply (if applicable) of the pneumatic tool before installing or removing dies.

DANGER DO NOT operate pneumatic tool without the modular plug adapter and proper die assembly installed. After modular plug adapter and die assembly has been installed, make sure that the quick pins are FULLY tightened to avoid personal injury and damage to the tool.

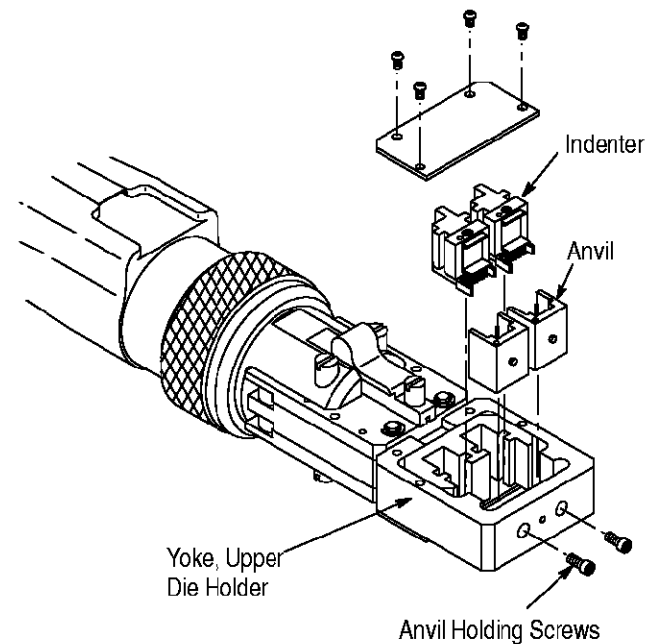


Figure 2

1. Remove the four button socket head cap screws as well as the front side plate.
2. Assemble anvil (stationary) die to indenter (movable) die as shown in Figure 2.

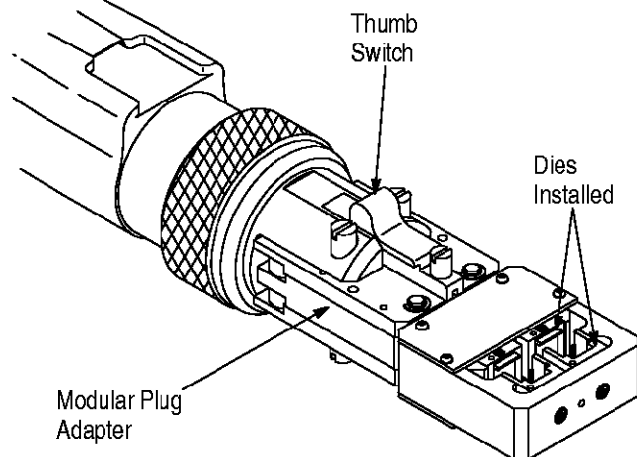


Figure 3

3. Install the die sets into the slots in the ram driver.

† Trademark of Loctite Corporation

DANGER

To avoid personal injury, ALWAYS disconnect the main air supply and electrical supply (if applicable) of the pneumatic tool system before performing maintenance or inspection.

4. Using the thumb switch, push the die sets forward, aligning the step on the die sets with the holes in the yoke.
5. Ensuring that the die sets are bottomed using the thumb switch, tighten the socket head cap screws securely.
6. Operate thumb switch a few times to ensure there is no interference. (If interference, repeat steps two through six).
7. Replace front side plate.

5. MAINTENANCE AND INSPECTION

AMP recommends that a maintenance and inspection program be performed periodically to ensure dependable and uniform terminations.

DANGER

To avoid personal injury, ALWAYS disconnect the main air supply and electrical supply (if applicable) of the pneumatic tool system before performing maintenance or inspection.

5.1. Daily Maintenance

AMP recommends that each operator be responsible for the following steps of daily maintenance:

1. Remove dust, moisture, and other contaminants with a clean, soft brush, or a lint-free cloth. DO NOT use objects that could damage the adapter.
2. Make sure that all pins, rings, and other components are in place and secure.
3. Make certain all surfaces are protected with a thin coat of any good SAE 20 motor oil. DO NOT oil excessively.
4. When the adapter is not in use, store it in a clean, dry area.

5.2. Periodic Inspection

Regular inspections should be performed by quality-control personnel. A record of scheduled inspections should remain with the adapter or be supplied to supervisory personnel responsible for it. Though recommendations call for at least one inspection a month, the frequency should be based on amount of use, working conditions, operator training and skill, and your established company policies. These inspections should include a visual inspection as described in Paragraph 5.3.

● Trademark of Dow Corning Corporation

5.3. Visual Inspection

1. Remove all lubrication and accumulated film by immersing the adapter in a suitable commercial degreaser that will not affect paint or plastic.
2. Make certain all components are in place. If replacements are necessary, refer to Section 7, REPLACEMENT AND REPAIR.
3. Check all bearing surfaces for wear. Replace worn parts.

5.4. Lubrication

Lubricate all pins, pivot points, and bearing surfaces with a high quality grease. AMP recommends the use of Molykote● paste, which is a commercially available lubricant. Lubricate according to the following schedule:

- Adapter used in daily production – lubricate daily
- Adapter used daily (occasional) – lubricate weekly
- Adapter used weekly – lubricate monthly

6. ADAPTER DISASSEMBLY AND ASSEMBLY

These instructions provide disassembly and assembly procedures which are to be used whenever internal parts of the adapter are to be replaced.

6.1. Disassembly (Refer to Figure 4)

1. Obtain a 12.7 mm [.50 in.] thick wooden block with a surface area large enough to accommodate the adapter. Lay the flat side of the adapter (side opposite the plastic switch) on the work surface of the block and mark the block at the approximate locations of the two slotted spring pins that are inserted through the sides of the adapter. Using the marks, drill two 6.35 mm [.25 in.] holes through the wooden block. The holes will facilitate driving the slotted spring pins out the bottom of the adapter.
2. Reposition the adapter on the block so that the slotted pins line up with the holes in the block. Using a 1/8-inch punch, drive the slotted pins approximately 6.35 mm [.25 in.] through the adapter housing.
3. Remove two retaining rings securing the two groove pins at the top of the adapter housing (on either side of the plastic switch), then remove the retaining pins
4. Remove the shoulder screw which secures the plastic switch to the internal die holder and remove the plastic switch.
5. Remove the four socket head cap screws and the four spring washers which secure the housing to the center housing, then remove the outer housing.

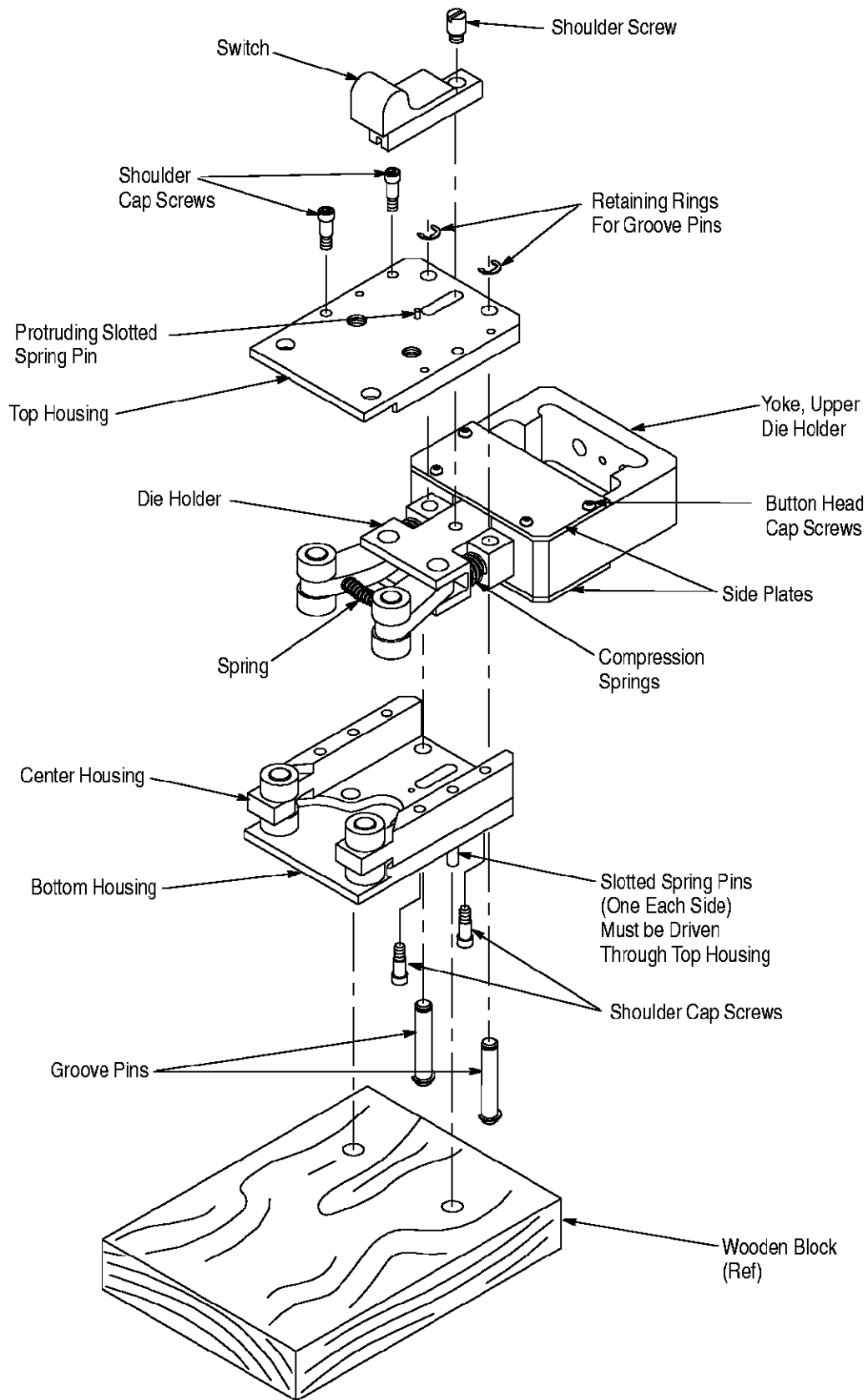


Figure 4

6.2. Assembly (Refer to Figure 4)

1. Properly position the die holder assembly in the center housing.
2. Replace housing and secure with the four socket head cap screws (with spring washers). DO NOT tighten screws.
3. Install the yoke between housing and center housing, after aligning the retaining pin holes in the housing, install the retaining pins and secure with retaining rings.

NOTE

It may be necessary to hold the yoke in place while installing the retaining pins. If retaining pins cannot be fully inserted through the housing, loosen the four socket head cap screws (installed in Step 2) to provide more freedom of movement of the outer housing.

4. Position the plastic switch so that the protruding slotted spring pin fits into the groove on the bottom side of the switch. Then slide the switch to align its mounting hole with the hole in the die holder.
5. Insert the shoulder screw through the plastic switch into the hole in the die holder and tighten the screw.
6. Tighten the four shoulder cap screws.

7. Using a bench vice, press the two slotted spring pins back into the housing.

7. REPLACEMENT AND REPAIR

Replacement parts and recommended spares are listed in Figure 5. The recommended spares should be stocked for immediate replacement. Replacement parts can be ordered from:

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

For further repair and replacement information, call the AMP Tooling Assistance Center at 1-800-722-1111.

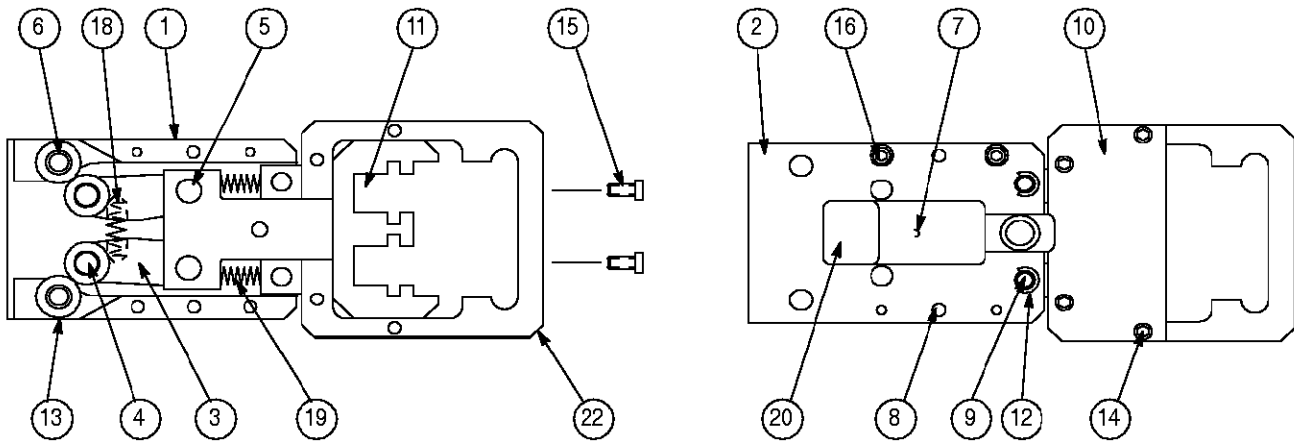
Tools may be returned to AMP for evaluation and repair. For tool repair service, contact an AMP representative at 1-800-526-5136.

8. REVISION SUMMARY

The following changes were made since the previous release of this instruction sheet:

Per EC 0990-0808-99

- Changed tool repair service information in Section 7, REPLACEMENT AND REPAIR
- Updated document format



ITEM	PART NUMBER	DESCRIPTION	QUANTITY PER ASSEMBLY
1	217342-1	Housing, Center	2
2	217349-1	Housing	2
3	217343-1	Link	2
4	217348-1	Pin	2
5	679495-1	Pin	2
6	217347-1	Pin	2
7	21028-1	Pin, Slotted Spring	1
8	5-21028-9	Pin, Slotted Spring	2
9	5-23619-3	Pin, Straight, Grooved .1875 Diameter	2
10	318804-1	Plate, Side	2
11	318802-1	Ram, Driver	1
12	21045-3	Ring, Retaining, External, Crescent	4
13	314479-4	Roller	8
14	1-21002-3	Screw, Button, Socket Head Cap (4-40 x .250)	8
15	1-21000-3	Screw, Socket Head Cap (4-40 x .250)	2
16	6-21000-8	Screw, Socket Head Cap (4-40 x .875)	4
17	1-21989-1	Screw, Socket Head Shoulder	1
18	3-22279-8	Spring, Compression	1
19	1-22282-4	Spring, Compression, .360 x .69	2
20	217340-1	Switch	1
22	318803-1	Yoke, Upper Die Holder	1

Figure 5