

PROPER USE GUIDELINES

Cumulative Trauma Disorders can result from the prolonged use of manually powered hand tools. AMP hand tools are intended for occasional use and low volume applications. AMP offers a wide selection of powered application equipment for extended-use, production operations.

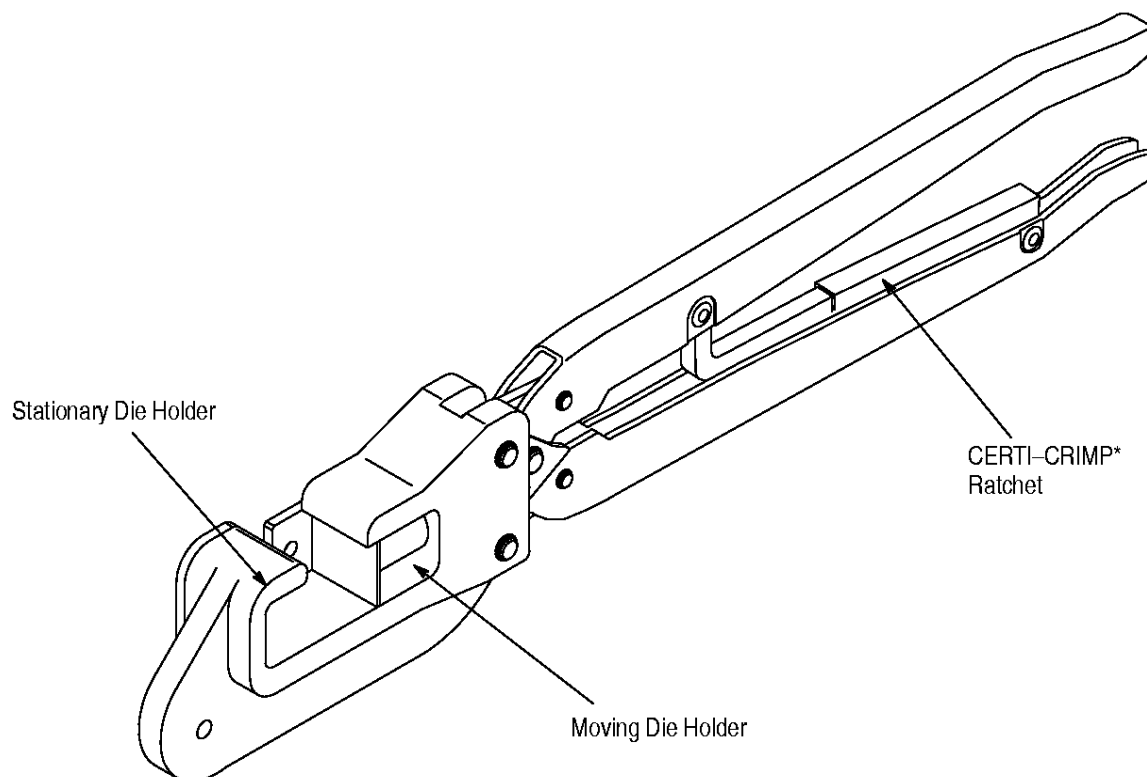


Figure 1

1. INTRODUCTION

AMP* Hand Crimping Tool 69710-1 uses interchangeable crimping dies and is used to crimp a wide variety of AMP products. The following instructions are general information only. Refer to the instruction sheets packaged with the dies for specific crimping instructions.

NOTE

Measurements are in millimeters [followed by inch equivalents in brackets]. Figures and illustrations are for identification only and are not drawn to scale.

Reasons for reissue are provided in Section 7, REVISION SUMMARY.

2. DESCRIPTION (Figure 1)

The hand tool features a stationary die holder and a moving die holder. The CERTI-CRIMP ratchet ensures full crimping of the terminal. Once engaged,

the ratchet will not release until the tool handles have been FULLY closed.

CAUTION

The crimping jaws bottom before the CERTI-CRIMP ratchet releases. This is a design feature that ensures maximum electrical and tensile performance of the crimp. Do NOT re-adjust the ratchet.

3. DIE INSERTION AND REMOVAL (Typical)

If dies to be installed in tool require insulation adjustment, refer to the instruction sheet packaged with dies for adjustment information, then proceed as follows:

1. Open tool handles by closing handles until CERTI-CRIMP ratchet releases. See Figure 1.
2. Each set of dies consists of a moving die and a stationary die. Most moving dies have square corners and the stationary dies have chamfered corners. See Figure 2. Exceptions to this feature will be shown on instruction sheets covering the use of these particular crimping dies.

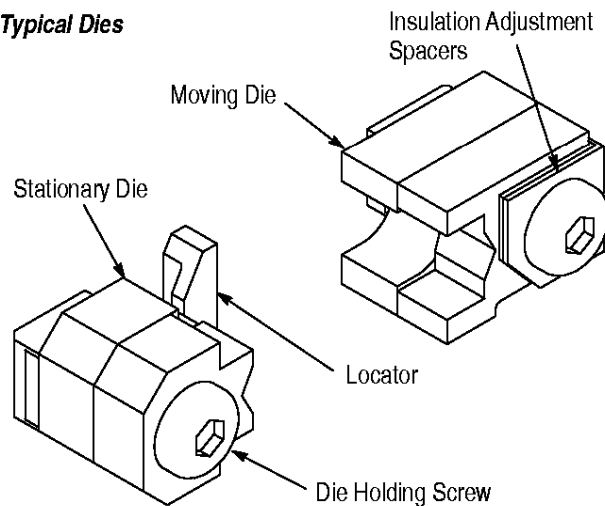
Typical Dies

Figure 2

3. Place stationary die in stationary die holder. Turn the holding screw enough to hold die in place. Do not tighten.
4. Place moving die in moving die holder. Turn the holding screw enough to hold die in place. Do not tighten.
5. Place terminal in stationary die.
6. Close handles so that moving die moves up enough to hold terminal in place. Do not crimp terminal.
7. Insert stripped wire into terminal until wire butts against locator.
8. Close handles until CERTI-CRIMP ratchet releases, but do not release handles.

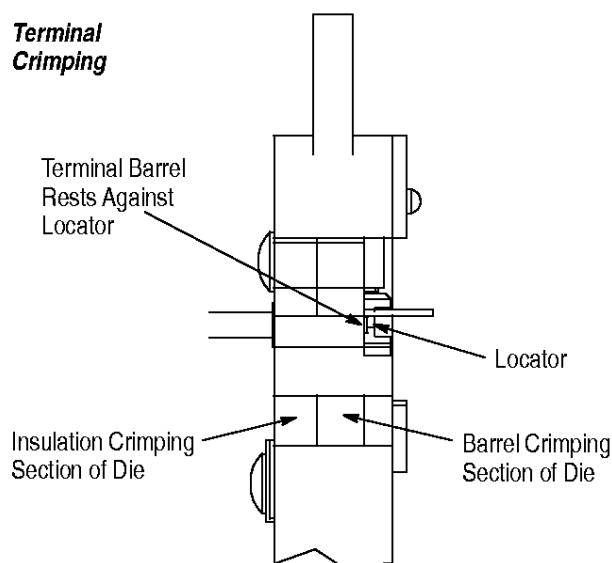
Terminal Crimping

Figure 3

9. Tighten the die holding screws. Open handles and remove terminal.

NOTE

Steps 5 through 9 are necessary to ensure proper seating of all inserts contained in PIDG* terminal crimping dies. If crimping dies contain only one section, disregard these steps and align dies and tighten screws.

10. Check die alignment and tighten die holding screws at least twice daily while tool is in use.
11. To remove or change dies, open tool handles, loosen die holding screws, and remove dies.

4. CRIMPING PROCEDURE (Typical)**NOTE**

The following crimping procedure is typical of most crimping dies used in these tools. Always refer to instruction sheets packaged with the dies for specific wire preparation and crimping instructions.

1. Place terminal or splice in stationary die. See Figures 3 and 4 for typical terminal and splice.
2. Close handles until terminal or splice is held firmly in place.
3. Insert stripped wire into terminal until wire butts against locator. Insert stripped wire into splice until wire butts against splice wire stop.
4. Holding wire in place, squeeze tool handles together FULLY. Open tool handles and remove crimped terminal or splice.
5. When crimping a butt splice, reposition uncrimped half in stationary die. If splice cannot be turned, turn tool around, insert stripped wire, and complete crimp.

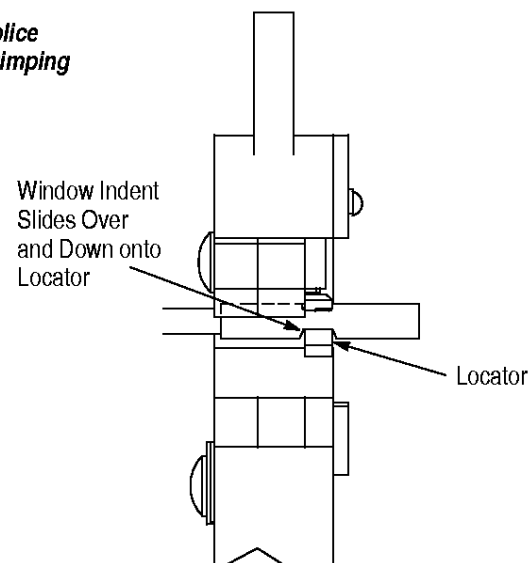
Splice Crimping

Figure 4

5. MAINTENANCE AND INSPECTION PROCEDURE

AMP recommends that a maintenance and inspection program be performed periodically to ensure dependable and uniform terminations. Though recommendations call for at least one inspection a month, frequency of inspection depends on:

1. The care, amount of use, and handling of the hand tool.
2. The presence of abnormal amounts of dust and dirt.
3. The degree of operator skill.
4. Your own established standards.

The hand tool is inspected before being shipped; however, AMP recommends that the tool be inspected immediately upon arrival to ensure that the tool has not been damaged during shipment.

5.1. Daily Maintenance

1. Hand tool should be immersed (handles partially closed) in a reliable commercial degreasing compound to remove accumulated dirt, grease, and foreign matter. When degreasing compound is not available, tool may be wiped clean with a soft, lint-free cloth. Do NOT use hard or abrasive objects that could damage the tool.
2. Make certain that the retaining pins are in place and that they are secured with retaining rings.
3. All pins, pivot points, and bearing surfaces should be protected with a THIN coat of any good SAE 20 motor oil. Do not oil excessively.
4. When the tool is not in use, keep handles closed to prevent objects from becoming lodged in the crimping jaws. Store the tool in a clean, dry area.

5.2. Periodic Inspection

A. Lubrication

Lubricate all pins, pivot points, and bearing surfaces with SAE 20 motor oil as follows:

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

Wipe excess oil from tool, particularly from crimping area. Oil transferred from the crimping area onto certain terminations may affect the electrical characteristics of an application.

B. Visual Inspection

1. Close tool handles until ratchet releases and then allow them to open freely. If they do not open

quickly and fully, the spring is defective and must be replaced. See Section 6, REPLACEMENT AND REPAIR.

2. Inspect head assembly for worn, cracked, or broken jaws. If damage is evident, return the tool to AMP for evaluation and repair. See Section 6, REPLACEMENT AND REPAIR.

C. CERTI-CRIMP Ratchet Inspection

The CERTI-CRIMP ratchet feature on AMP hand tools should be checked to ensure that the ratchet does not release prematurely, allowing the jaws to open before they have fully bottomed. Obtain a 0.025 mm [.001 in.] shim that is suitable for checking the clearance between the bottoming surfaces of the crimping jaws. Proceed as follows:

1. Install die set in hand tool.
2. Thoroughly clean the bottoming surfaces of dies.
3. Make a test crimp using the maximum wire load, i.e., a 16 AWG wire in a 22-16 terminal. When this crimp is made, squeeze handles until the CERTI-CRIMP ratchet releases. Hold the handles in this position, maintaining just enough tension to keep the jaws closed.
4. Check the clearance between the bottoming surfaces of the crimping jaws. If the clearance is 0.025 mm [.001 in.] or less, the ratchet is satisfactory. If clearance exceeds 0.025 mm [.001 in.], the ratchet is out of adjustment and must be repaired. See Section 6, REPLACEMENT AND REPAIR.

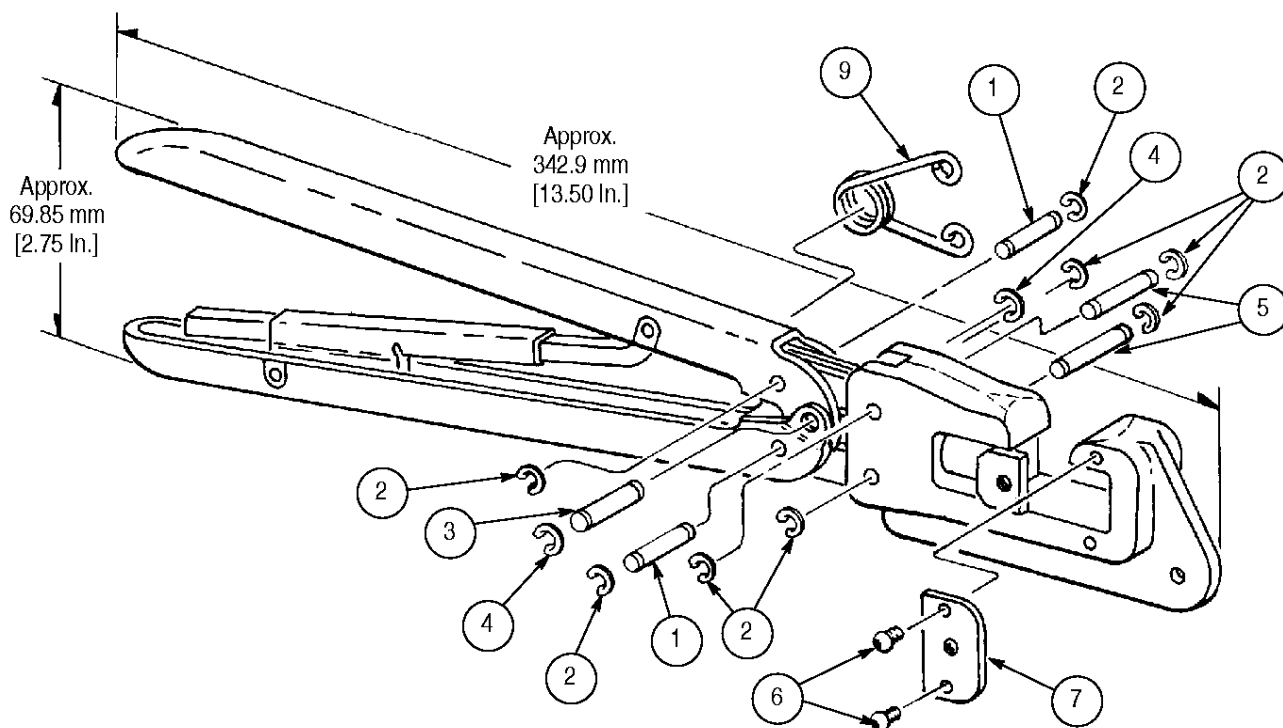
6. REPLACEMENT AND REPAIR

The parts listed in Figure 5 are customer-replaceable. A complete inventory can be stocked and controlled to prevent lost time when replacement of parts is necessary. Order replacement parts through your AMP representative, or call 1-800-526-5142, or send a facsimile of your purchase order to 717-986-7605, or write to:

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

Tools may also be returned to AMP for evaluation and repair. For repairs, send the tool with a written description of the problem to:

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



REPLACEMENT PARTS

ITEM	PART NUMBER	DESCRIPTION	QTY PER ASSY
1	300388	PIN, Retaining	2
2	21045-3	RING, Retaining	8
3	300389	PIN, Retaining	1
4	21045-6	RING, Retaining	2
5	305340	PIN, Retaining	2
6	1-21002-6	SCREW	2
7	304400-2	PLATE, Die Holder	1
8	2-304668-9	SPRING	1

Figure 5

7. REVISION SUMMARY

Since the previous release of this sheet, the following changes were made:

Per EC 0990-0305-98

- Superseded Hand Tool 69710 with Hand Tool 69710-1
- Revised Figure 5