

### 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.

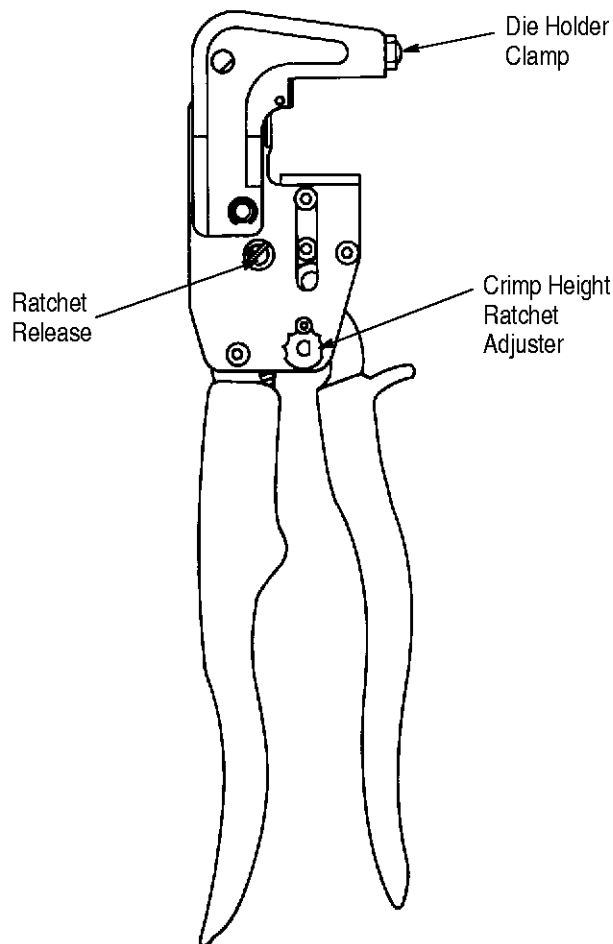


Figure 1

### 1. INTRODUCTION

AMP® CERTI-LOK Hand Crimping Tool 58194-1 accepts interchangeable die assemblies to crimp AMP SDL (Shielded Data Link) connectors. Refer to the instructions packaged with the die assemblies for die installation, connector selection information, crimping procedure, and maintenance information. Read these instructions carefully before crimping connectors.

#### 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)

Hand Crimping Tool 58194-1 contains a ratchet release, a crimp height ratchet adjuster, a die holding head, and a die holder clamp.

The ratchet release allows the user to disengage the ratchet and open the partially-closed tool handles when necessary. The ratchet adjuster is used to adjust the handle pressure, which ensures that the dies are completely closed before the ratchet releases, allowing the tool to open. Refer to Paragraph 5.2,E, Ratchet Adjustment.

The die holding head and die holder clamp form a secure framework for holding the upper and lower dies securely in place while crimping an SDL connector.

### 3. DIE INSTALLATION AND REMOVAL

#### 3.1. Installation

Squeeze the tool handles together until the ratchet releases, and allow the tool handles to open FULLY. Proceed as follows:

1. Loosen the button head cap screws on the die holder clamp using an appropriate hex wrench, and swing the clamp upward.
2. Compress the die assembly by pushing on the die shoes (as close as possible to the die posts); insert the die assembly straight into the die holding head until it butts against the back of the tool head and then release the compression on the die assembly.
3. Return the die holder clamp to its original position, and secure it with a hex wrench.

### 4. CRIMPING PROCEDURE

Refer to the instructions packaged with the dies for connector selection and correct positioning of the dies. Proceed as follows:

1. Insert stripped cable into connector
2. Insert connector with cable into die assembly.
3. Close tool handles until ratchet releases to complete crimp. Once ratchet is engaged, handles will not open until they are *fully* closed, thereby ensuring a complete crimp.

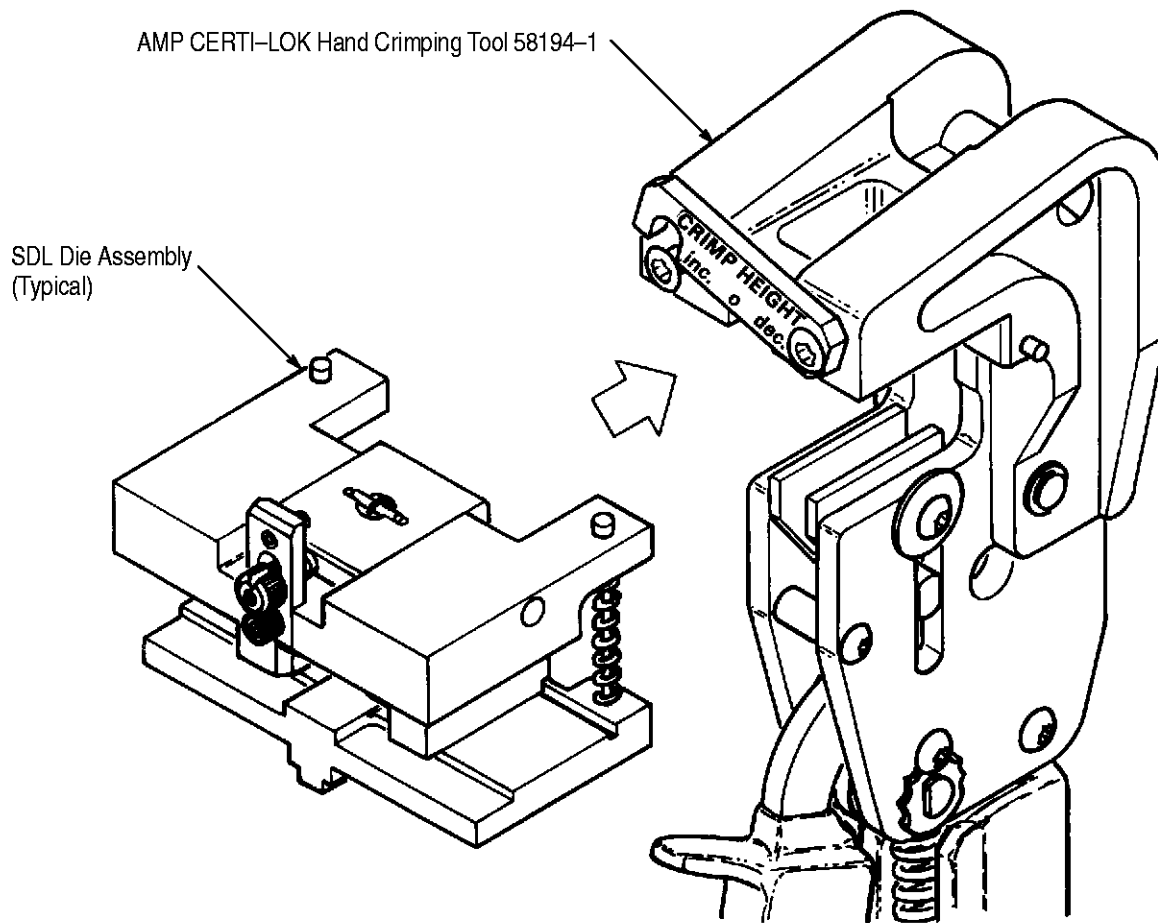


Figure 2

**NOTE**

*In the event that a connector is positioned incorrectly in the die assembly, or if a wrong die assembly was selected, open tool handles by squeezing tool handles slightly and turning ratchet release counterclockwise (see arrow in Figure 1).*

4. Remove crimped connector.

**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:

- The care, amount of use, and handling of the hand tool,
- The presence of abnormal amounts of dust and dirt,
- The degree of operator skill, and
- 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 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. Gaging the Crimping Chamber

Refer to the instruction sheet supplied with dies for a procedure for gaging the die assembly crimping chamber.

### D. Ratchet Inspection

**NOTE**

*A set of dies must be installed in the tool for a ratchet inspection.*

Obtain a .025-mm [.001-in.] shim that is suitable for checking the clearance between the bottoming surfaces of the crimping dies, and proceed as follows:

1. Select a connector and wire (maximum size) for the dies.
2. Position the connector and wire between the crimping dies, according to the crimping procedure in die assembly instruction sheets.
3. Holding the wire in place, squeeze the tool handles together until the ratchet releases. Hold the tool handles in this position, maintaining just enough pressure to keep the dies closed.
4. Check the clearance between the bottoming surfaces of the crimping dies. If clearance exceeds .025 mm [.001 in.], the ratchet must be adjusted as described in Paragraph 5.2, E, Ratchet Adjustment.
5. If the tool conforms to these inspection procedures, lubricate it with a thin coat coat of any

good grade SAE motor oil, and return the tool to service.

### E. Ratchet Adjustment

To adjust the ratchet (and tighten the crimp) proceed as follows:

1. Remove the screw on the adjuster wheel from each side of the tool head.
2. With pliers, grip the knob on the locator side of the tool head and turn the wheel clockwise one full notch.
3. Install screws and perform a test crimp.
4. Inspect the ratchet as described in Paragraph 5.2, D. If necessary re-adjust the ratchet as described in this paragraph.

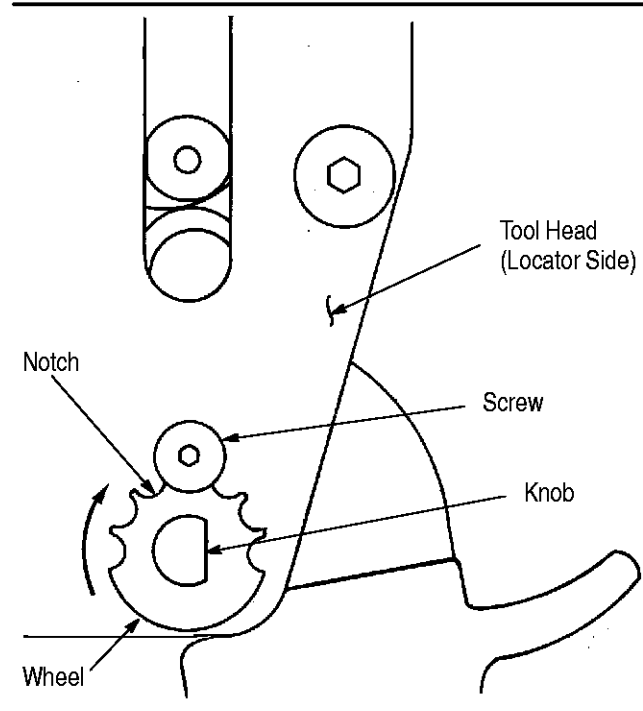


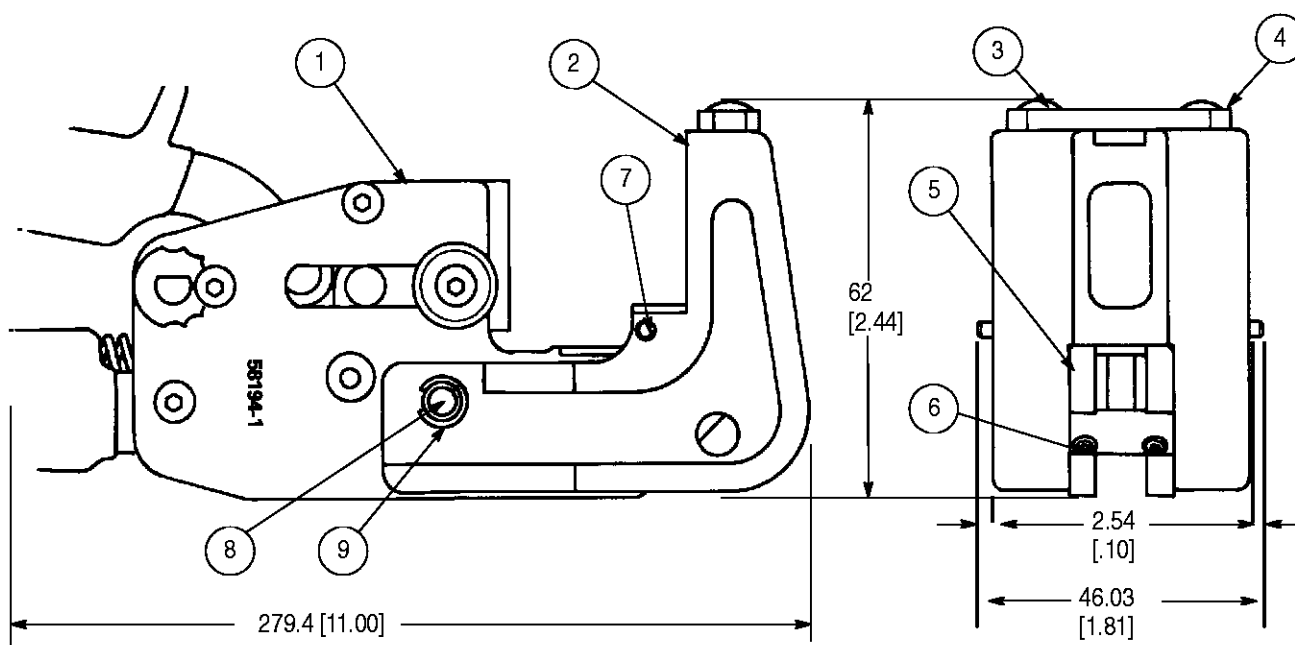
Figure 3

## 6. REPLACEMENT AND REPAIR (Figure 4)

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 tool repair service, contact an AMP representative at: 1-800-526-5136.



## REPLACEMENT PARTS

ITEM	PART NUMBER	DESCRIPTION	QTY PER TOOL
1	312836-1	TOOL, Modified CERTI-LOK	1
2	312825-1	HEAD, Die Holding	1
3	1-21002-7	SCREW, Btn Hd Skt Cap (No.6-32 X .38 In. L)	2
4	312821-1	CLAMP, Die Holder	1
5	312823-1	CLAMP, Tool Holder	1
6	2-210006-8	SETSCREW, Skt (No. 6-32 X .188 In. L)	2
7	8-21028-9	PIN, Slotted Spring (.094 Dia. X .18 In. L)	2
8	312833-1	PIN, Die Holding	1
9	1-21986-3	RING, Retaining	2

Figure 4

## 7. REVISION SUMMARY

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

Per EC 0990-0725-99

- Changed tool repair service information in Section 6, REPLACEMENT AND REPAIR
- Updated document format