

### 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.

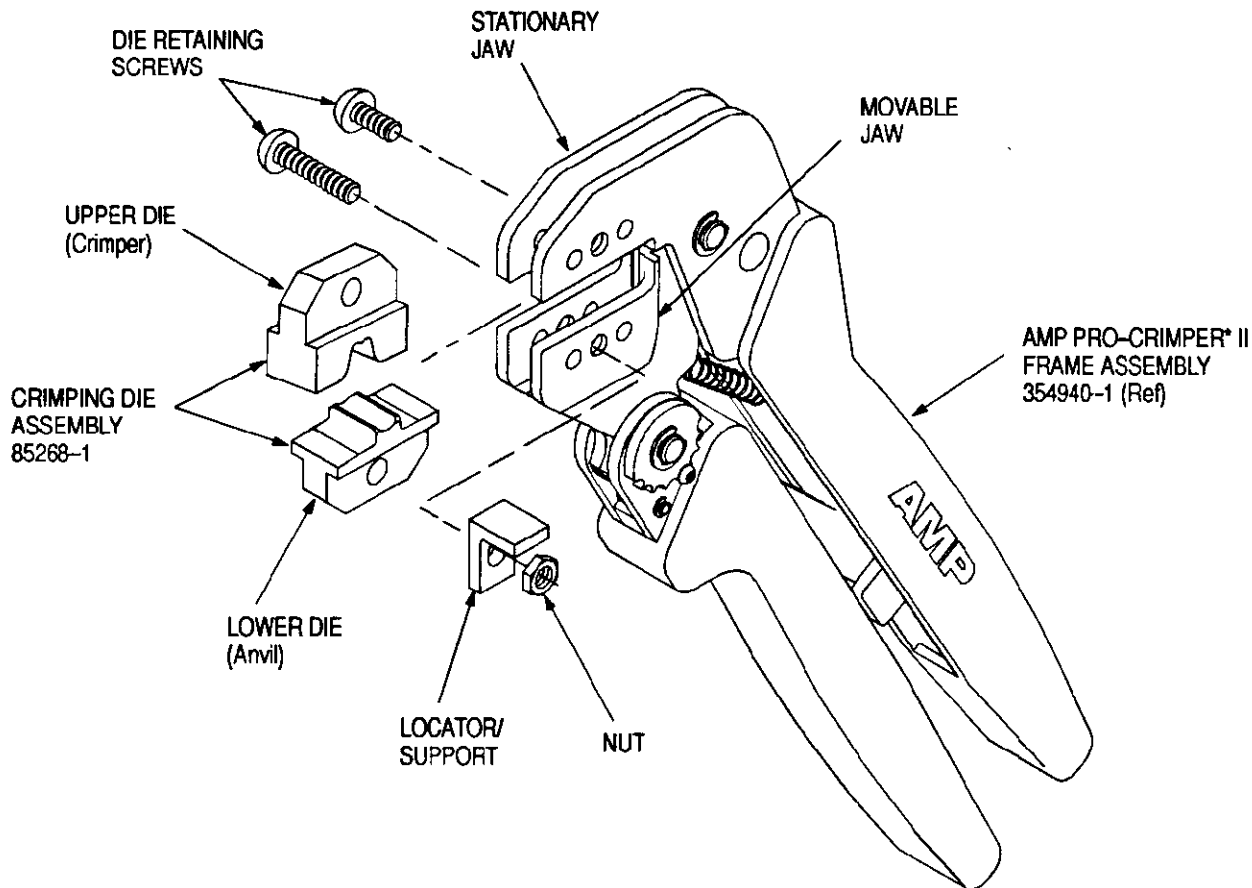


Figure 1

### 1. INTRODUCTION

AMP Crimping Die Assembly 852681-1 is designed to crimp AMP Strain Relief 943072-2 onto six- and eight-position, shielded, line cord Modular Plug Connectors 555175-[ ] and 555179-[ ] that have been terminated onto shielded round cable size 28-26 AWG with a maximum insulation diameter of 5.08 mm [.200 in.]. The dies are used in AMP PRO-CRIMPER II Frame Assembly 354940-1.

#### NOTE

*Dimensions are in millimeters [followed by inch equivalents in brackets].*

Reasons for reissue are provided in Section 9, REVISION SUMMARY.

### 2. DESCRIPTION

The die assembly consists of an upper die (crimper) and a lower die (anvil), which when mated form the crimping chamber. The die assembly also has a locator/support used to position and support the terminated line cord assembly and provide strain relief for crimping. See Figure 1.

### 3. DIE INSTALLATION (Figure 1)

1. Close the tool frame handles until the ratchet releases and allow the handles to open fully.
2. Slide the crimper into the stationary jaw of the tool and place the short die retaining screw through the retaining hole in the tool and the die. Thread, but do not tighten, the screw.

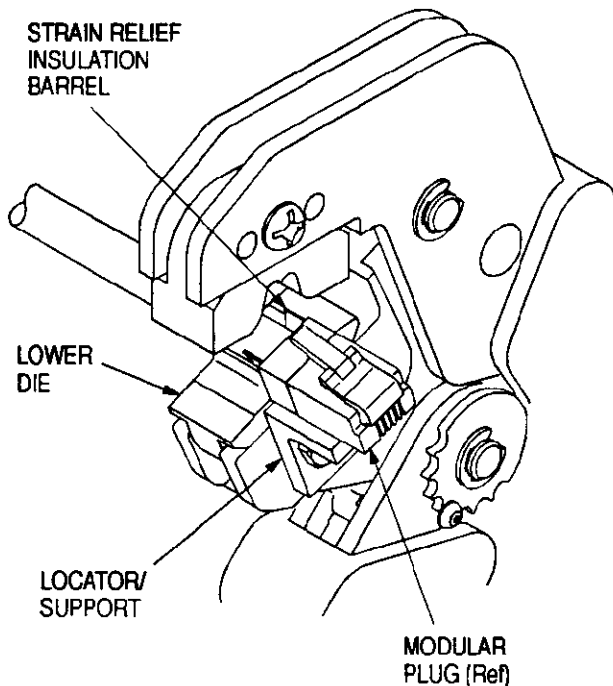


Figure 2

3. Slide the anvil into the movable jaw of the tool and place the long screw (provided with the die assembly) through the retaining hole in the tool and the die. Thread, but do not tighten, the screw.

4. Slowly close the tool handles until the dies align themselves. Tighten the die retaining screws with the appropriate hex wrench.

5. Lay the tool on a flat surface and place the locator/support on the exposed portion of the die retaining screw on the movable jaw. Thread the nut onto the screw, just finger tight.

6. Align the support plate of the locator/support so that it is flush with flat sides of the lower die. Tighten the nut, with an appropriate open end wrench, until snug.

#### 4. CRIMPING PROCEDURE

**NOTE** This tool is provided with a crimp height adjustment feature. Initially, the crimp height should be verified. Refer to Section 5, MEASURING CRIMP HEIGHT, to verify crimp height before using the tool.

For detailed information on proper assembly and terminating tools and dies for the modular plug, refer to AMP Instruction Sheet 408-9612, packaged with the terminating tool. Then proceed as follows:

#### 4.1. Strain Relief Installation

If the strain relief has not been installed on the modular plug, or if the modular plug has not been terminated onto the cable, perform the following steps. If the strain relief has been installed on a terminated plug, refer to Paragraph 4.2, Strain Relief Crimping.

1. Terminate the modular plug onto the cable.
2. Place the strain relief into the primary strain relief slot of the modular plug body. The strain relief features integral grippers which retain it in the slot.

#### 4.2. Strain Relief Crimping (Figure 2)

1. Close tool handles until ratchet releases and allow to open fully.
2. Place the modular plug on the locator/support of the tool with the plastic locking latch of the plug uppermost.
3. Slide the modular plug toward the lower die until the strain relief is butted against the edges of the die. Close the tool handles until the strain relief insulation barrel is gripped by the dies.
4. Ensure that fingers are clear of the crimping dies and then squeeze the tool handles until the ratchet releases.
5. Allow tool handles to open. Remove terminated strain relief/modular plug assembly.

#### NOTE

If the strain relief is bent, adjust the locator/support by loosening the nut and sliding the locator/support until it is properly positioned for a straight termination.

#### 5. MEASURING CRIMP HEIGHT

When initially installed, and at regular intervals thereafter, the dies should have their crimp height measured to ensure that a good crimp is being applied to the strain relief of the connector. Measure crimp height as follows:

1. Crimp a strain relief as described in Section 4, CRIMPING PROCEDURE.
2. Measure the crimped height of the strain relief insulation barrel (refer to Figure 2) with calipers or a cone micrometer. The crimped height must be  $4.57 \pm 0.10$  [.180  $\pm$ .004].
3. If the crimped height does not fall within the acceptable range, it may be necessary to adjust the tool ratchet. Refer to Section 6, CRIMP HEIGHT ADJUSTMENT.

## 6. CRIMP HEIGHT ADJUSTMENT (Figure 3)

The tool frame assembly ratchet mechanism features an adjustment wheel with numbered settings. If the crimp height is not acceptable, adjust the ratchet as follows:

1. Remove the lock screw from the ratchet adjustment wheel.
2. With a screwdriver, adjust the ratchet wheel from the opposite side of the tool.
3. Observe the ratchet adjustment wheel. If a tighter crimp is required, rotate the adjustment wheel COUNTERCLOCKWISE to a higher-numbered setting. If a looser crimp is required, rotate the adjustment wheel CLOCKWISE to a lower-numbered setting.
4. Replace the lock screw.
5. Make a sample crimp and measure the crimp height. If the crimp height is acceptable, secure the lock screw. If the dimension is unacceptable, remove lock screw and continue to adjust the ratchet, and again measure a sample crimp.

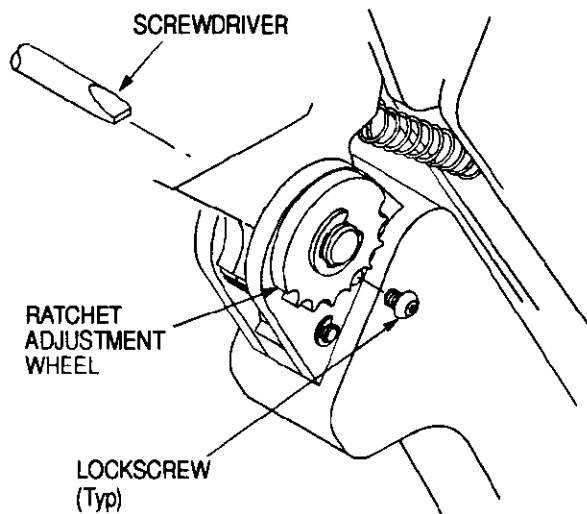


Figure 3

## 7. MAINTENANCE AND INSPECTION

### 7.1. Maintenance

1. Remove dust, moisture, and other contaminants with a clean, soft brush, or a clean, soft, lint-free cloth. Do NOT use any objects that could damage the dies or tool.
2. Make sure that the proper die retaining screws are properly secured.

3. When the dies are not in use, store them in a clean, dry area.
4. Store the tool with the tool handles closed to prevent objects from becoming lodged within the jaws.

### 7.2. Inspection

1. Remove all lubrication and accumulated film from the dies by immersing the dies in a suitable commercial degreaser.
2. Make certain that all die retaining screws and die components are properly secured.
3. Inspect the crimping surfaces for flattened, chipped, worn, or cracked areas. If damage is evident, the dies must be replaced. Refer to Section 8, REPLACEMENT.

## 8. REPLACEMENT

AMP Crimping Die Assembly 85268-1 is inspected before shipment. AMP recommends that the dies be inspected immediately upon arrival at your facility to ensure that the dies have not been damaged during shipment.

Order replacements through your local AMP 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)  
AMP INCORPORATED  
P.O. BOX 3608  
HARRISBURG, PA 17105-3608

## 9. REVISION SUMMARY

Revisions to this document include:

Per EC 0150-3295-94:

- Replaced Hand Tool Frame 220190-1 with PRO-CRIMPER II Frame Assembly 354940-1 in text and figures
- Changed 'button head cap screws' to 'die retaining screws'

Per EC 0990-0252-93:

- Updated format
- Added metric units
- Removed part number for hex wrench from Section 3, Step 4
- Corrected reference instruction sheet number in Section 4
- Added NOTE to Section 4
- Added Section 6 and Figure 3