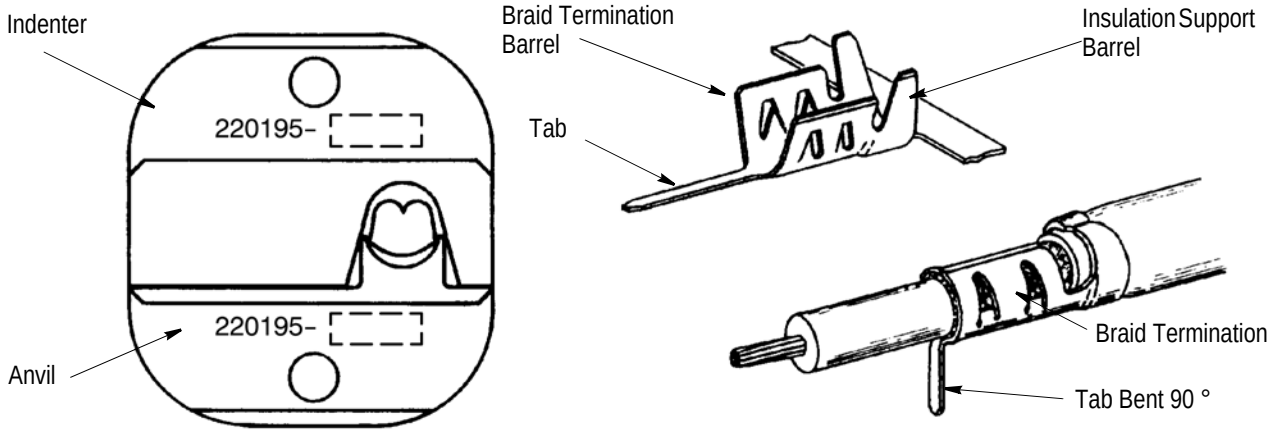
Application and Maintenance for Crimping Die Assembly 220195-1

PROPER USE GUIDELINES

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



CABLE	TERMINAL		DIE ASSEMBLY PART NUMBER
	PART NUMBER	STYLE	
RG-58	226854-1	Strip With Solder Tab	220195-1
RG-59	226855-1		

Figure 1

1. INTRODUCTION

Crimping Die Assembly 220195-1 is designed to be used in THE PRO-CRIMPER* III Hand Tool Frame 354940-1 to crimp the Braid-Pic terminals shown in Figure 1. Read these instructions thoroughly before using the die assembly.

For detailed information on the use and maintenance of PRO-CRIMPER III Hand Tool Frame 354940-1, refer to Instruction Sheet 408-9930, which is packaged with the tool frame.

NOTE

All dimensions on this sheet are in millimeters [with inch equivalents in brackets]. Figures and illustrations are for identification only and are not drawn to scale.

Reasons for reissue are provided in Section 10, REVISION SUMMARY.

2. DESCRIPTION

The die assembly consists of an indenter (upper die) and an anvil (lower die). The indenter is installed in the stationary portion of the tool head and the anvil is installed in the moving portion.

When closed, the die assembly forms two crimping sections. One section is an F-crimp for the braid termination barrel; the other is an O-crimp for the insulation support barrel. The Braid-Pic terminals designed for braid termination only have a rectangular tab which - after crimping - must be bent to a 90° angle for insertion into a pc board. (Both the center contact of the cable and the tab are then wave soldered, permanently attaching the terminal/cable assembly to the pc board.)

3. INSTALLING DIE ASSEMBLY

1. Open the tool handles and remove the two die retaining screws from the tool jaws.

2. Orient the die assembly with the hand tool as shown in Figure 2.

3. Insert the die retaining screws through the jaws and dies, and tighten the screws just enough to hold the dies in place. Do not tighten the screws completely at this time.

4. Insert a piece of paper between the dies. (The paper will help align the dies when the handles are squeezed.)

5. .Carefully close the tool handles, making sure that the anvils and crimpers align properly. Continue closing the tool handles until the ratchet in the tool frame has engaged sufficiently to hold the anvils

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and crimpers in place, then tighten both die retaining screws.

To remove the dies, close the tool handles until the ratchet releases, then remove the two die retaining screws and slide the dies out of the tool jaws

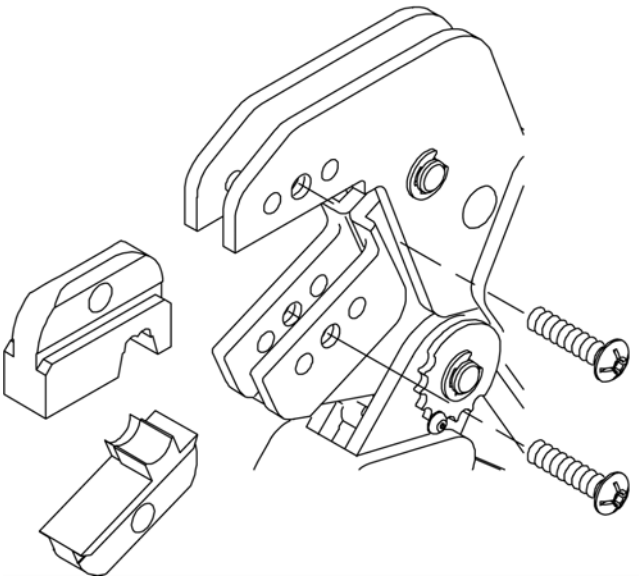


Figure 2

4. CABLE PREPARATION AND CRIMPING PROCEDURE

1. .Strip the cable as shown in Figure 3.

2. Select a terminal and then place the stripped cable into the braid termination section of the terminal, using a straight downward motion. Make sure that the braid seats in the "pic-type" braid-termination barrel and that the outer insulation fits into the support barrel. See Figure 4.

NOTE: Not to Scale

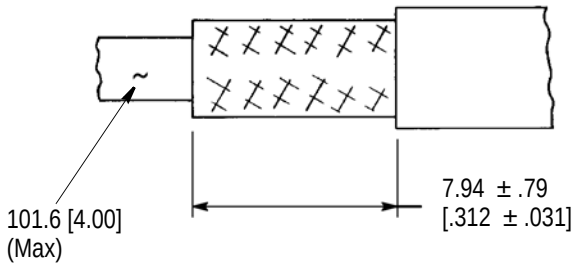


Figure 3

3. Pick up the hand tool and squeeze the handles together until the ratchet releases, allowing the crimping dies to spread apart. Then orient the tool so that the insulation crimp (O-crimp) faces you and squeeze the handles slightly to partially close the dies.

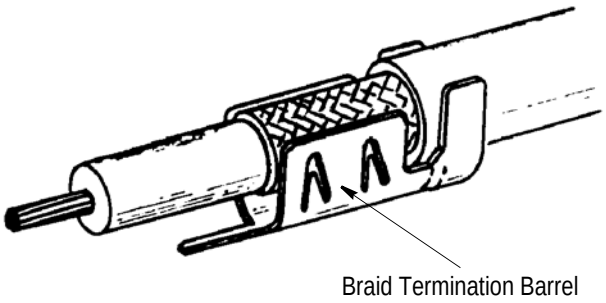


Figure 4

4. Place the terminal-cable assembly between the dies with the cable extending away from you, as shown in Figure 5.

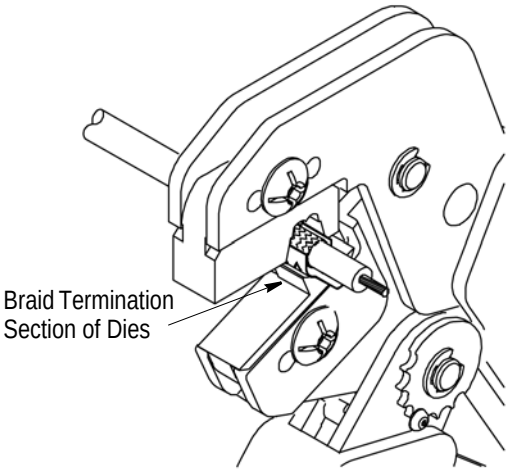


Figure 5

5. Squeeze the tool handles together until the ratchet releases, completing the crimp. Make sure the terminal-cable assembly remains in place during the process.

6. Bend the tab of the crimped terminal approximately 90° as shown in Figure 6.

7. Using the pc board layout shown in Figure 7, drill holes to accept the bent tab.

5. CRIMP HEIGHT INSPECTION

Crimp height inspection is performed using a micrometer with a modified anvil commonly referred to as a crimp height comparator. Refer to Instruction Sheet 408-7424 for detailed information on obtaining and using crimp height comparators.

To inspect the crimp height, proceed as follows:

1. Refer to Figure 8 and select the correct terminal for the wire being used.

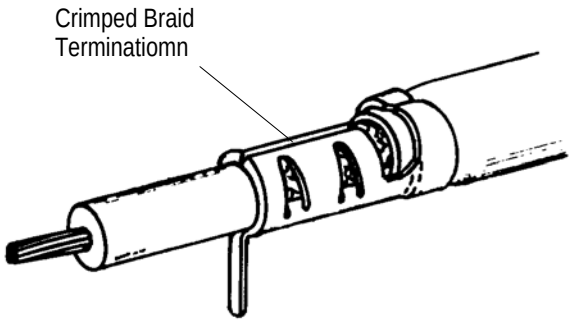


Figure 6

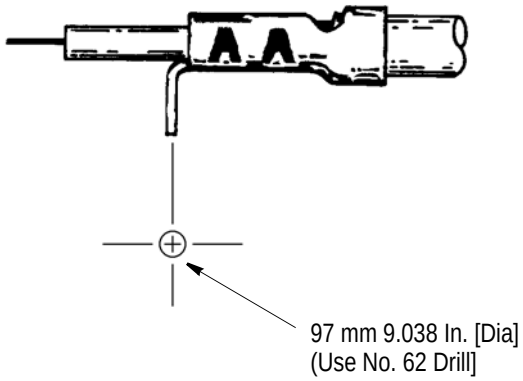
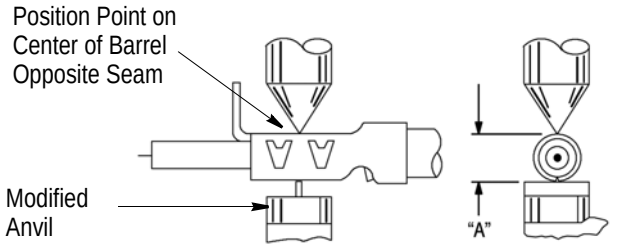


Figure 7



PART NUMBER		CRIMP HEIGHT "A" (In. [mm])	
DIE ASSY	TERMINAL	BRAID SECTION	INSUL SPT SECTION
220195-1	226854-1	3.99 to 4.11 [.157 to .162]	5.3 ± .3 [.21 (±.01)]
	226855-1	4.24 to 4.37 [.167 to .172]	6.6 ± .3 [.26 (±.01)]

Figure 8

2. Refer to Section 4, CABLE PREPARATION AND CRIMPING PROCEDURE, and crimp the terminal accordingly.

3. Using a crimp height comparator, measure the braid barrel crimp height as shown in Figure 8. If the crimp height conforms to that shown in the chart, the tool is considered dimensionally correct. If not, refer to Section 6, CRIMP HEIGHT ADJUSTMENT, for information on adjusting the crimp height.

For additional information concerning the use of the crimp height comparator, refer to instruction sheet 408-7424.

6. CRIMP HEIGHT ADJUSTMENT (FIGURE 9)

1. Remove the lockscrew from the ratchet adjustment wheel.

2. With a screwdriver, adjust the ratchet wheel from the locator 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 lockscrew.

5. Make a sample crimp and measure the crimp height. If the dimension is acceptable, replace and secure the lockscrew. If the dimension is unacceptable, continue to adjust the ratchet, and again measure a sample crimp.

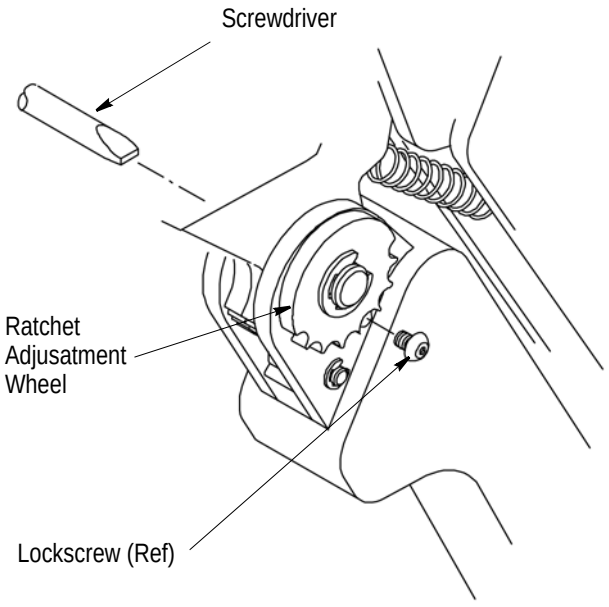


Figure 9

7. MAINTENANCE

Ensure that the dies are clean by wiping them with a clean, soft cloth. Remove any debris with a clean, soft brush. Do not use objects that could damage the dies. When the dies are not in use, mate them and store the

dies in a clean, dry area. Store the tool with the handles closed to prevent objects from becoming lodged within the jaws.

8. VISUAL INSPECTION

The crimping dies should be inspected on a regular basis to ensure that they have not become worn or damaged. Inspect the crimp sections for flattened, chipped, worn, or broken areas. If damage or abnormal wear is evident, the dies must be replaced. See Section 9, REPLACEMENT.

9. REPLACEMENT

Customer-replaceable parts are shown in Figure 10. If the dies are damaged or worn excessively, they must be replaced.

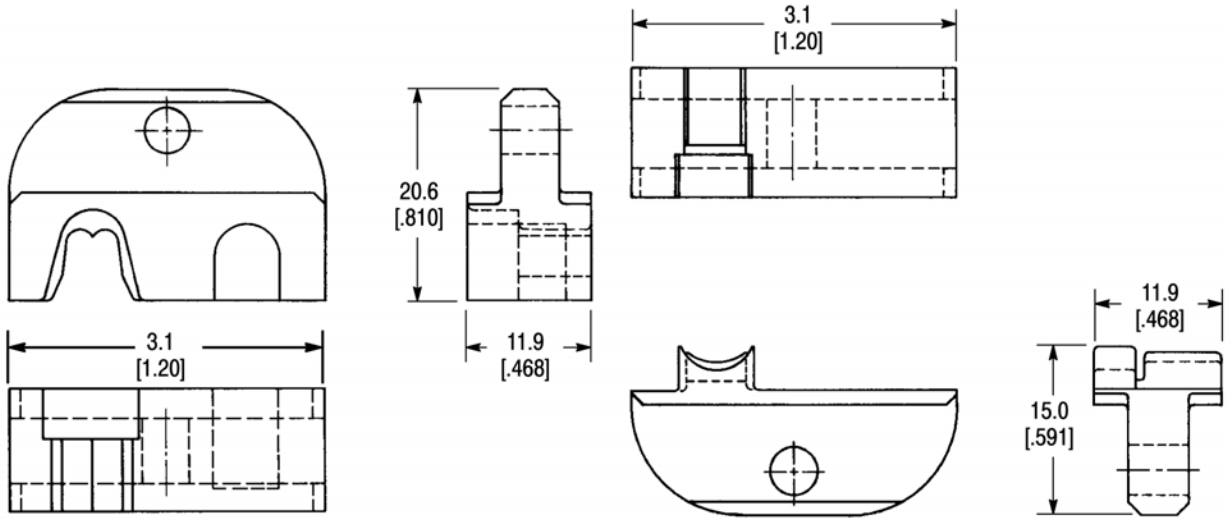
Available separately, PRO-CRIMPER III Repair Kit 679221-1 includes a replacement nut and a variety of pins, rings, screws, and springs for use on the PRO-CRIMPER II Hand Tool Frame.

Order the repair kit and replaceable parts through your TE 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 (038-035)
TYCO ELECTRONICS CORPORATION
PO BOX 3608
HARRISBURG PA 17105-3608

10. REVISION SUMMARY

Since the previous release of this instruction sheet, the new company logo has been applied.



PART NUMBERS		
DIE ASSEMBLY	INDENTER	ANVIL
220195-1	310646-2	310647-2

Figure 10