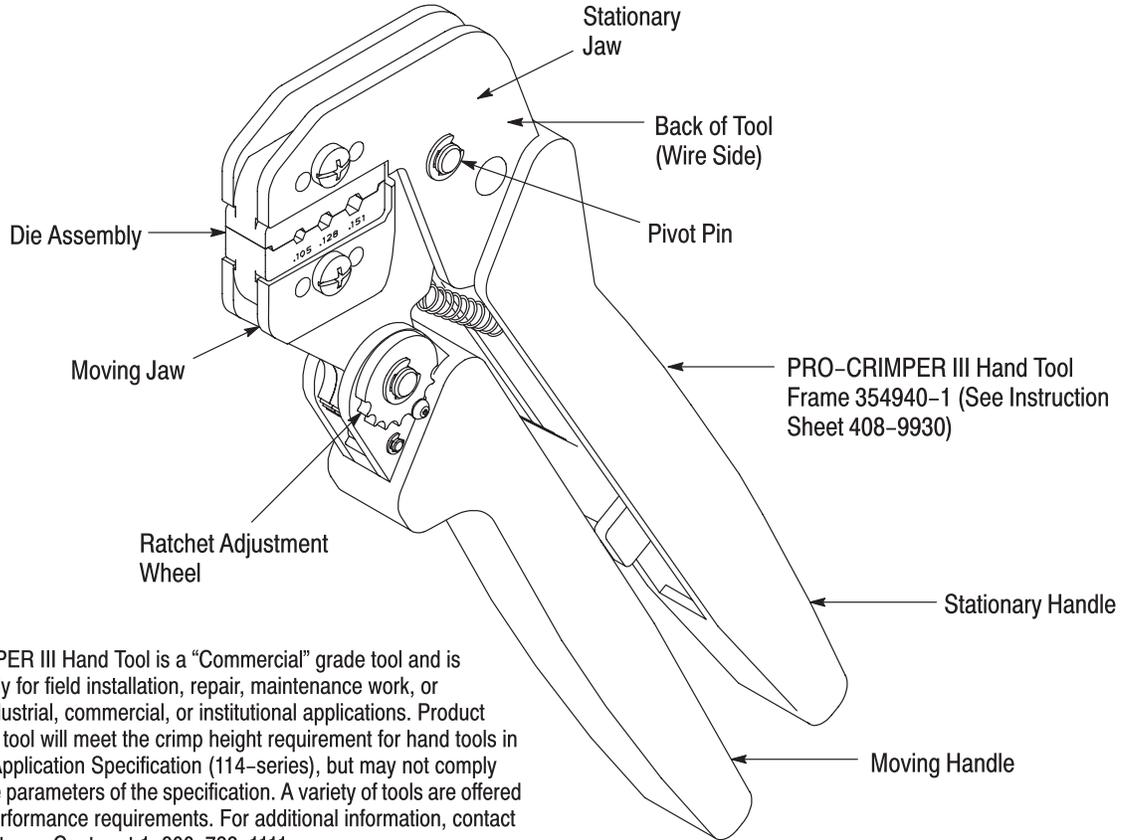


**PROPER USE GUIDELINES**

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.



The PRO-CRIMPER III Hand Tool is a "Commercial" grade tool and is designed primarily for field installation, repair, maintenance work, or prototyping in industrial, commercial, or institutional applications. Product crimped with this tool will meet the crimp height requirement for hand tools in the appropriate Application Specification (114-series), but may not comply with other feature parameters of the specification. A variety of tools are offered to satisfy your performance requirements. For additional information, contact the Tooling Assistance Center at 1-800-722-1111.

DIE ASSEMBLY	PRODUCT FAMILY	FLEXIBLE COAXIAL CABLE SIZE (RG/U)	DIE ASSEMBLY CRIMPING CHAMBER MARKING
58483-1	SMB Straight Cable Plug Connectors	178, 196	.105 (A)
		174, 179, 187, 188, 316	.128 (B)
		174, 188, 316 (All Double Braid)	.151 (C)

Figure 1

**1. INTRODUCTION**

PRO-CRIMPER III Hand Tool Assembly 58499-1 consists of PRO-CRIMPER III Hand Tool Frame 354940-1 and Die Assembly 58483-1. The tool assembly is used to crimp the ferrule of the connectors listed in Figure 1. In this use, the die assembly does not provide for crimping of the center contact.

Read these instructions thoroughly before using the tool assembly.



*Dimensions in this instruction sheet are in millimeters [with inches in brackets]. Figures are not drawn to scale.*

For additional information on the hand tool frame, refer to 408-9930. Refer to the applicable connector instruction sheet for assembly of the connector.

Reasons for reissue of this instruction sheet are provided in Section 8, REVISION SUMMARY.

**2. DESCRIPTION** (Figure 1)

The tool frame features a stationary jaw and handle, a moving jaw, a moving handle, and an adjustable ratchet that ensures full crimping. The tool frame holds the die assembly.

The die assembly consists of an indenter (stationary die) and an anvil (moving die). When closed, the dies form three crimping chambers. Each die is held in the hand tool frame by a single screw.

**3. INSTALLATION AND REMOVAL OF DIE ASSEMBLY** (Figure 2)

1. Close the tool handles until the ratchet releases, then allow the handles to open fully.
2. Insert the dies into the tool jaws as shown in Figure 2, and align the retaining holes in each die with the associated hole in the tool.

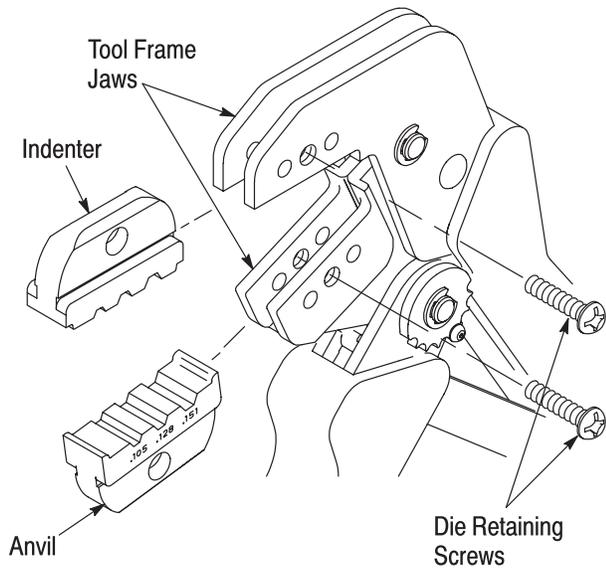


Figure 2

3. Thread, but do not tighten, the die retaining screws into the holes.
4. Carefully close the tool handles, making sure that the dies align properly.
5. Tighten the die retaining screws with the appropriate hex wrench.
6. To disassemble, close the tool handles until the ratchet releases, remove the two die retaining screws, and slide the dies out of the tool jaws.

**4. CRIMPING PROCEDURE** (Ferrule Only)

Make sure that the center contact is properly crimped and assembled onto the connector as described in applicable connector instruction sheet. Then proceed as follows:

1. Slide the ferrule over the cable braid until it is positioned against the shoulder of the plug body.
2. Close the tool handles until the ratchet releases, then allow the handles to open FULLY.
3. Place the ferrule in the appropriate crimping chamber on the anvil die so that the shoulder of the plug body is close to the edge of the die. Refer to Figure 3.



Refer to Figure 1 for the appropriate crimping chamber.

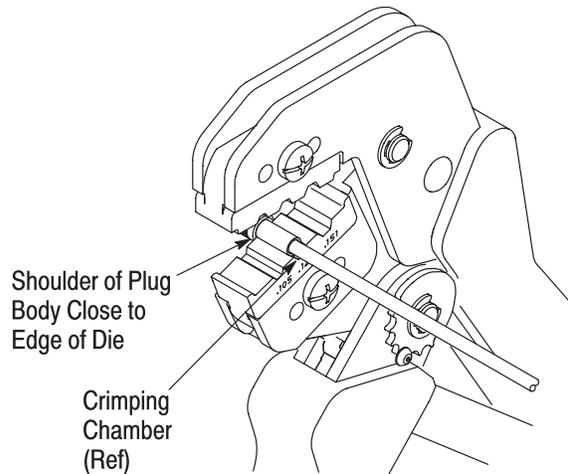


Figure 3

4. While holding the assembly, close the tool handles until the dies hold the ferrule in place.
5. Carefully close the tool handles until the ratchet releases, then allow the handles to open FULLY.
6. Remove the ferrule from the dies.
7. Inspect the crimped ferrule according to applicable connector instruction sheet. If necessary, adjust the ratchet as described in Section 5.

**5. RATCHET ADJUSTMENT** (Figure 4)

The tool ratchet mechanism features an adjustment wheel with numbered settings. The adjustment wheel controls the amount of handle pressure exerted on the jaws during crimping. If the crimp is not acceptable, adjust the ratchet as follows:

1. Remove the lock screw from the ratchet adjustment wheel.

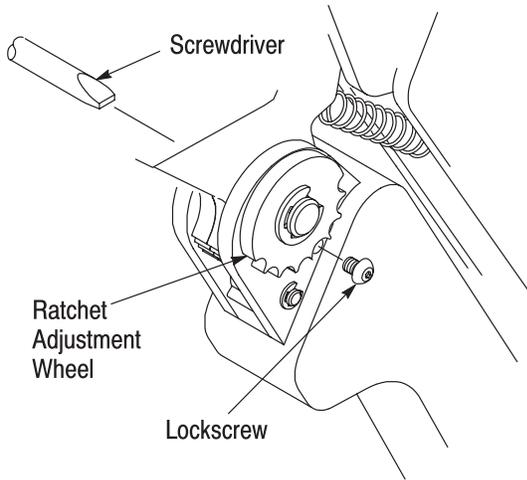


Figure 4

2. With a screwdriver, adjust the ratchet wheel from the front 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. Re-assemble the lockscrew.
5. Make a sample crimp. If the crimp is acceptable, the adjustment setting is correct. If the crimp is unacceptable, continue to adjust the ratchet, and again measure a sample crimp.

**6. MAINTENANCE AND INSPECTION**

**6.1. Maintenance**

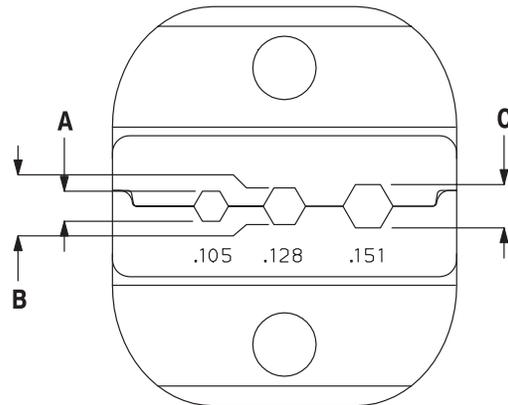
Ensure that the tool frame and dies are clean by wiping them with a clean, soft cloth. Remove any debris with a clean, soft brush. Do not use objects that could damage any components. When not in use, keep tool handles closed to prevent objects from becoming lodged in the dies, and store in a clean, dry area.

**6.2. Visual Inspection**

Inspection of the dies should be made on a regular basis to ensure that they have not become worn or damaged. Inspect the crimping sections for flattened, chipped, worn, or broken areas. If damage or abnormal wear is evident, the dies must be replaced. Refer to Section 7, REPLACEMENT.

**6.3. Measuring Die Opening**

Figure 5 provides dimensions for the die openings.



DIE OPENING DIMENSION $\pm 0.10$ [ $\pm .004$ ]		
A	B	C
2.667 [.105]	3.251 [.128]	3.835 [.151]

Figure 5

**7. REPLACEMENT**

Customer-replaceable parts are shown in Figure 1. Available separately, Repair Kit 679221-1 includes a replacement nut and a variety of pins, rings, screws, and springs. If the dies are damaged or worn excessively, they must be replaced. Order the repair kit and replaceable parts through your representative, or call 1-800-526-5142, or send a facsimile of your purchase order to 717-986-7605, or write to:

CUSTOMER SERVICE (038-035)  
 TYCO ELECTRONICS CORPORATION  
 PO BOX 3608  
 HARRISBURG PA 17105-3608

**8. REVISION SUMMARY**

Revisions to this instruction sheet include:

- Updated document to corporate requirements

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