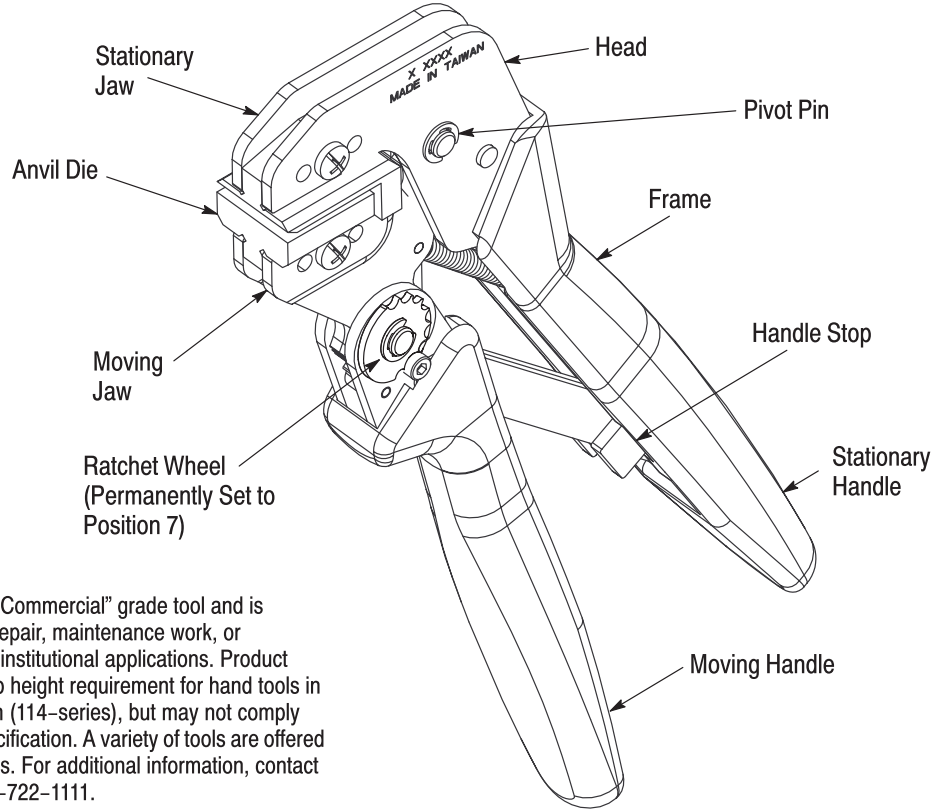


**PROPER USE GUIDELINES**

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.

PRODUCT FAMILY	POWER CABLE SIZE (AWG)	CONNECTOR	
		TAP	SPLICE
Undercarpet Connector	10-12	553455-2	553454-1

Figure 1

**1. INTRODUCTION**

Undercarpet PRO-CRIMPER III Hand Tool Assembly 91392-1 is used to crimp the connectors listed in Figure 1. Read these instructions thoroughly before using the tool assembly.



*Dimensions in this instruction sheet are in millimeters [with inches in brackets]. Figures and illustrations are for reference only and are not drawn to scale.*

Reasons for reissue of this instruction sheet are provided in Section 6, REVISION SUMMARY.

**2. DESCRIPTION** (Figure 1)

The tool assembly consists of a frame and anvil die. The frame features a stationary jaw and handle, a moving jaw and handle, a handle stop, and a ratchet that ensures full crimping. The stationary jaw holds the anvil die. A die retaining screw is used to secure the die. When closed, the die and moving jaw forms a crimping chamber.

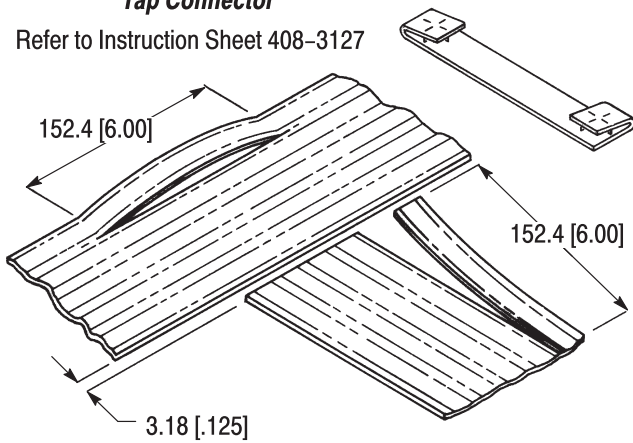
**3. CRIMPING PROCEDURE**

Refer to Figure 1, and select cable of the specified size and connector for the type of application, and proceed as follows:

1. Separate the conductors of the cable along the perforations to the dimensions given in Figure 2.

**Tap Connector**

Refer to Instruction Sheet 408-3127



**Splice Connector**

Refer to Instruction Sheet 408-3128

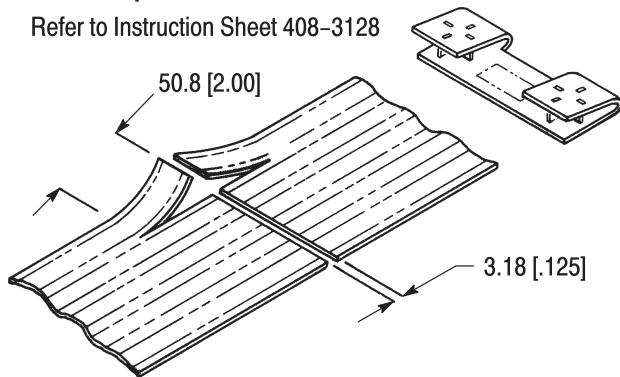


Figure 2

**CAUTION**



Before starting crimping, refer to the instruction sheet packaged with the tap and splice connectors for preparation procedure and assembly sequence. The applicable sheets are referenced in Figure 2. Failure to do so could prevent sealing of insulation patches.

2. Hold the tool so that the flat side of the head is parallel with the floor. See Figure 3.
3. Gently lift the cable and straddle the tool jaws with between the conductor and the connector. Refer to Figure 3.
4. Squeeze the tool handles together until one handle bottoms on the handle stop.
5. Allow the handles to open FULLY, the tool from the connector.
6. Repeat Steps 2 through 5 as necessary for one side of the cable.

**4. MAINTENANCE AND INSPECTION**

**4.1. Maintenance**

Ensure that the tool frame and die 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 die and moving jaw, and store in a clean, dry area.

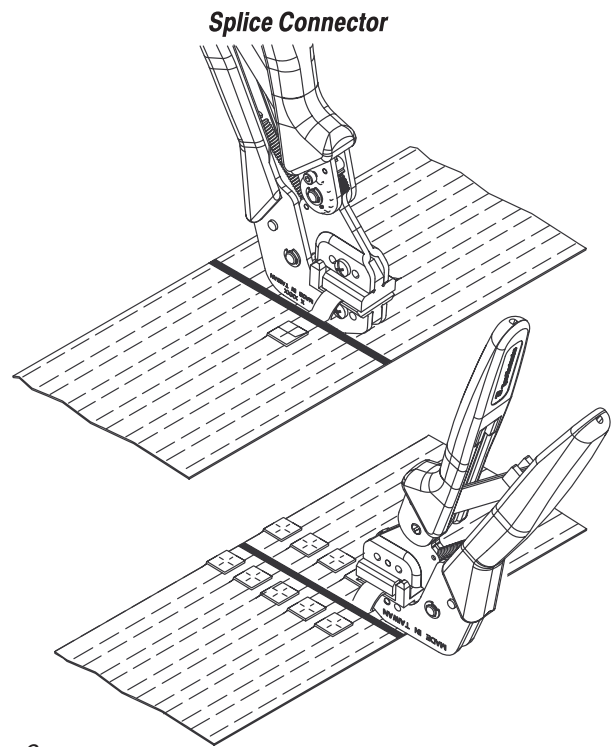
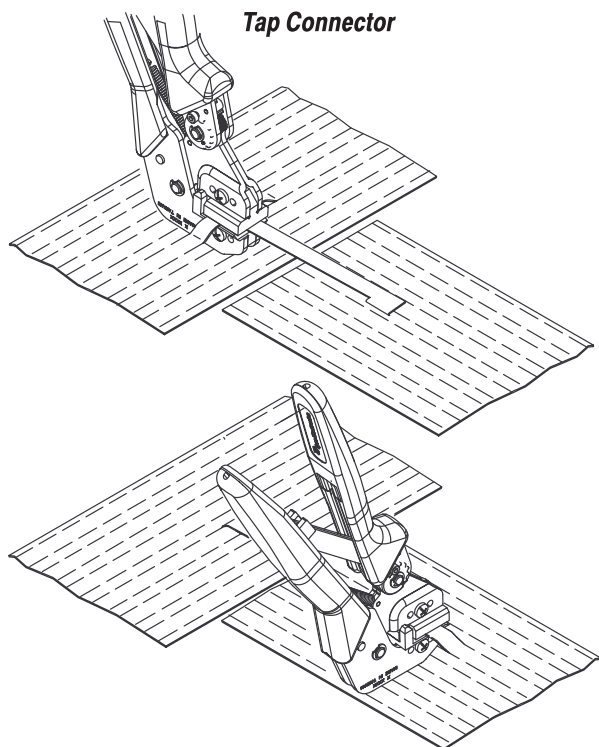


Figure 3

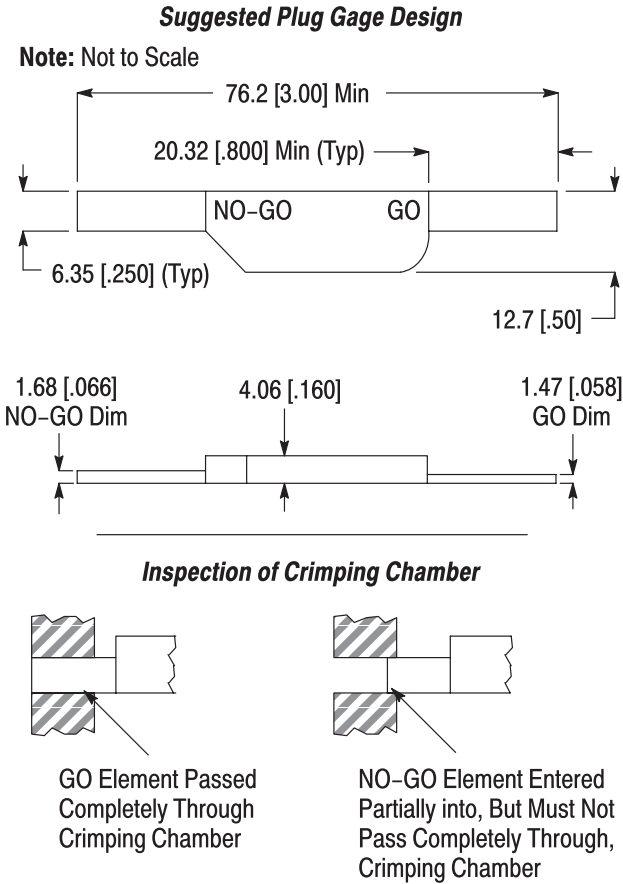


Figure 4

**4.2. Visual Inspection**

The die and moving jaw should be inspected on a regular basis to ensure it has not become worn or damaged. Inspect the crimping surfaces for flattened, chipped, worn, or broken areas. If damage or abnormal wear is evident, the tool must be replaced. See Section 5, REPLACEMENT.

**4.3. Tool Closure Inspection**

Squeeze the tool handles together until one handle bottoms on the handle stop. The die and moving jaw should bottom properly, and the crimping chamber

should conform to the gaging inspection described in Paragraph 4.3.

**4.4. Gaging the Crimping Chamber**

This inspection requires the use of a plug gage conforming to the dimensions provided in Figure 4. To gage the crimping chamber, proceed as follows:

1. Remove traces of oil or dirt from the crimping chamber and plug gage.
2. Close the tool handles until one handle bottoms on the handle stop; then hold in this position. DO NOT force beyond initial contact.
3. Insert GO element into the crimping chamber; but do not force it. The GO element must pass completely through the length of the crimping chamber.
4. In the same manner, try to insert the NO-GO element into the crimping chamber. The NO-GO element may enter partially, but must not pass completely through the length of the crimping chamber.

If the crimping chamber conforms to the gage inspection, the tool may be considered dimensionally correct and should be lubricated with a THIN coat of any good SAE 20 motor oil. If the crimping chamber does NOT conform to the gage inspection, the tool must be repaired.

**5. REPLACEMENT**

Available separately, Repair Kit 679221-1 includes a replacement lock nut and a variety of pins, rings, screws, and springs. If the die is damaged or worn excessively, it 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

**6. REVISION SUMMARY**

- Initial release of document