

**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.

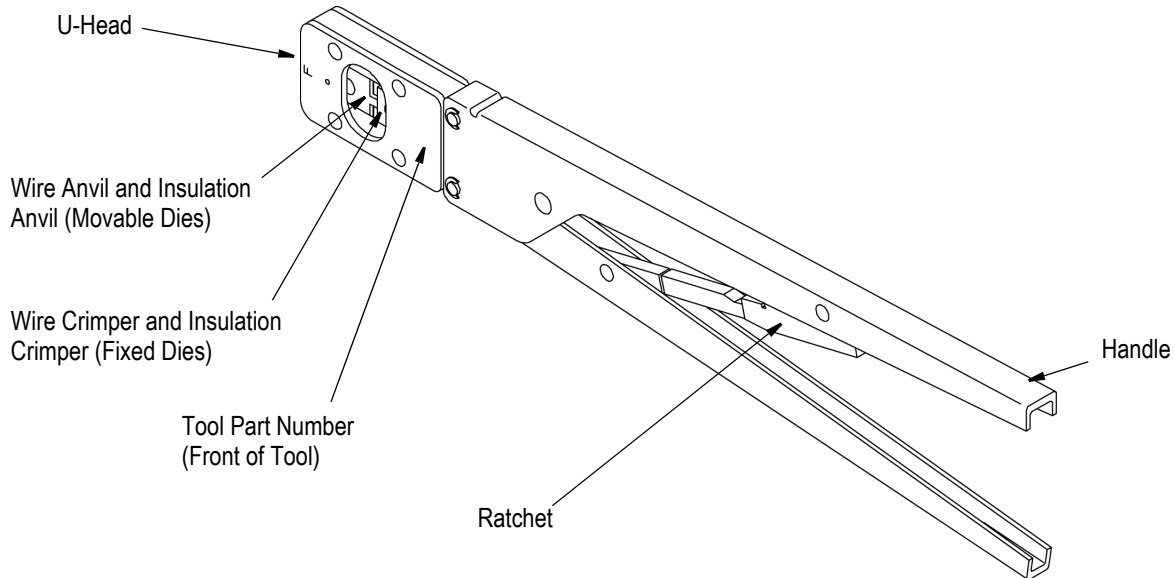


Figure 1

**1. INTRODUCTION**

SAHT Assembly 69547 is used to crimp Crimp-On Receptacle 67263-[ ] onto stranded copper wire sizes 26 through 22 AWG with an insulation diameter range of 0.86 through 1.37 mm [.034 through .054 in.].



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

Reasons for reissue are provided in Section 6, REVISION SUMMARY.

**2. DESCRIPTION** (See Figure 1)

The tool is coated with preservative to prevent rust and corrosion. Wipe this preservative from the tool, particularly from the crimping surfaces.

The front of the tool, into which the receptacle is inserted, is marked with the tool part number. The back of the tool, into which the wire is inserted, is marked with crimp symbols.

The hand tool consists of a U-head and handle. The U-head features two movable dies (wire anvil and insulation anvil) and two fixed dies (wire crimper and insulation crimper). When closed, the dies form a crimping chamber.

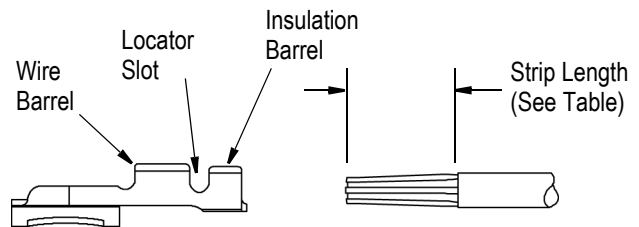
This tool is a member of the CERTI-CRIMP\* hand crimping tool family. The ratchet ensures full crimping of the receptacle. Once engaged, the ratchet will not release until the handles have been FULLY closed.



*The dies bottom before the ratchet releases. This ensures maximum electrical and tensile performance of the crimp. DO NOT re-adjust the ratchet.*

**3. CRIMPING PROCEDURE**

1. Strip the wire according to the dimension shown in Figure 2. DO NOT use wire with nicked, cut, or missing conductors.



RECEPTACLE	WIRE		
	Side Range (AWG)	Insulation Diameter Range	Strip Length
67263-[ ]	26-22	0.86 - 1.37 [.034 - .054]	3.57 [.141]

Figure 2

2. Squeeze the tool handles until the ratchet releases. Allow the handles to open FULLY.
3. Insert the receptacle into the crimping chamber with the "U" shape of the insulation barrel facing the crimper dies. Position the receptacle so that the tool locator enters the locator slot of the receptacle. See Figure 3.
4. Holding the receptacle in position, squeeze the tool handles until the insulation anvil starts entry into the insulation crimper. DO NOT deform the insulation barrel or wire barrel.
5. Insert the stripped wire into the insulation barrel until the wire butts against the locator wire stop. See Figure 3.

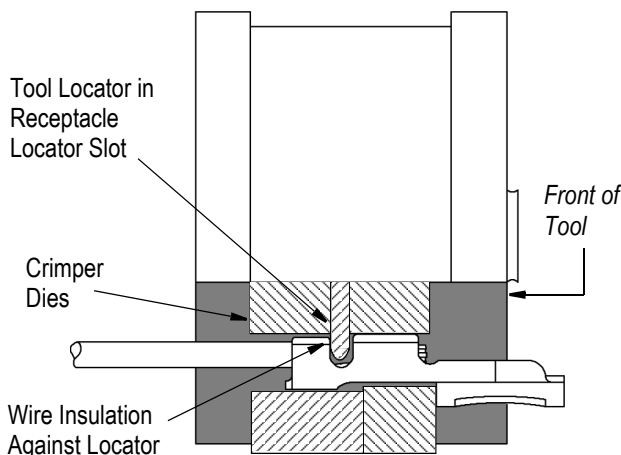


Figure 3

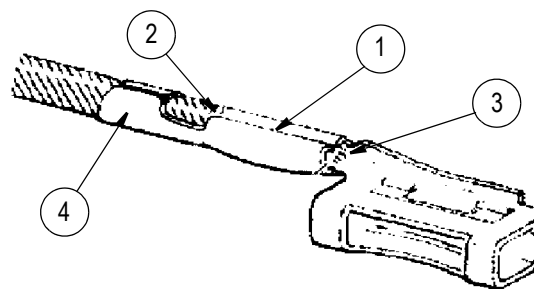
6. Squeeze the tool handles until the ratchet releases. Allow the handles to open FULLY.
7. Remove the receptacle from the tool, and visually inspect the crimp according to Figure 4.

#### 4. MAINTENANCE AND INSPECTION

It is recommended 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:

1. The care, amount of use, and handling of the hand tool.
2. The presence of abnormal amounts of dust and dirt.
3. The degree of operator skill.
4. Your own established standards.

The hand tool is inspected before being shipped; however, it is recommended that the tool be inspected immediately upon arrival at your facility to ensure that the tool has not been damaged during shipment.



- 1 Wire Barrel Seam Closed to Confine All Conductors
- 2 Wire Insulation Does Not Enter Wire Barrel
- 3 End of Wire is Flush With (or Extends Slightly Past) End of Wire Barrel
- 4 Insulation Barrel Wrapped Around, But Not Cutting Into, Wire Insulation

Figure 4

#### 4.1. Daily Maintenance

1. The 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, the 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. When the tool is not in use, keep handles closed to prevent objects from becoming lodged in the dies. Store the tool in a clean, dry area.

#### 4.2. Lubrication

Keep all pins, pivot points, and bearing surfaces lubricated with any good SAE 20 motor oil as follows:

- Tools used in daily production - lubricate daily
- Tools used daily (occasionally) - lubricate weekly
- Tools used weekly - lubricate monthly

Wipe excess oil from the tool, particularly from the crimping area. Oil transferred from the crimping area onto certain terminations may affect the electrical characteristics of an application.

#### A. Visual Inspection

1. Close the tool handles until the ratchet releases and then allow them to open freely. If they do not open quickly and fully, the tool must be repaired. See Section 5, REPLACEMENT AND REPAIR.
2. Inspect the head and dies for worn, cracked, or broken areas. If damage is evident, the tool must be repaired. See Section 5, for REPLACEMENT AND REPAIR.

### 4.3. Ratchet Inspection

Check the ratchet to ensure that the ratchet does not release prematurely, allowing the dies to open before they have fully bottomed. Proceed as follows:

1. Remove traces of oil or dirt from the bottoming surfaces of the dies.
2. Obtain a 0.025 [.001] shim that is suitable for checking the clearance between the bottoming surfaces of the dies.
3. Select a receptacle and maximum size wire for the receptacle.
4. Position the receptacle in the crimping chamber according to Section 3, CRIMPING PROCEDURE. 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.
5. Check the clearance between the bottoming surfaces of the dies. If the clearance is 0.025 [.001] or less, the ratchet is satisfactory. If clearance exceeds 0.025 [.001], the ratchet is out of adjustment and must be repaired. See Section 5, REPLACEMENT AND REPAIR.

### 4.4. Gaging the Crimping Chamber (Insulation Dies)

This inspection requires the use of the plug gage conforming to the dimensions provided in Figure 5. To gage the crimping chamber for the insulation barrel crimp, proceed as follows:

1. Remove traces of oil or dirt from the crimping chamber and plug gage.
2. Close the tool handles until the crimping surfaces of the dies have bottomed; 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 through the length of the crimping chamber. See Figure 5.
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 insulation dies 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.

For additional information regarding the use of a plug gage, refer to 408-7424.

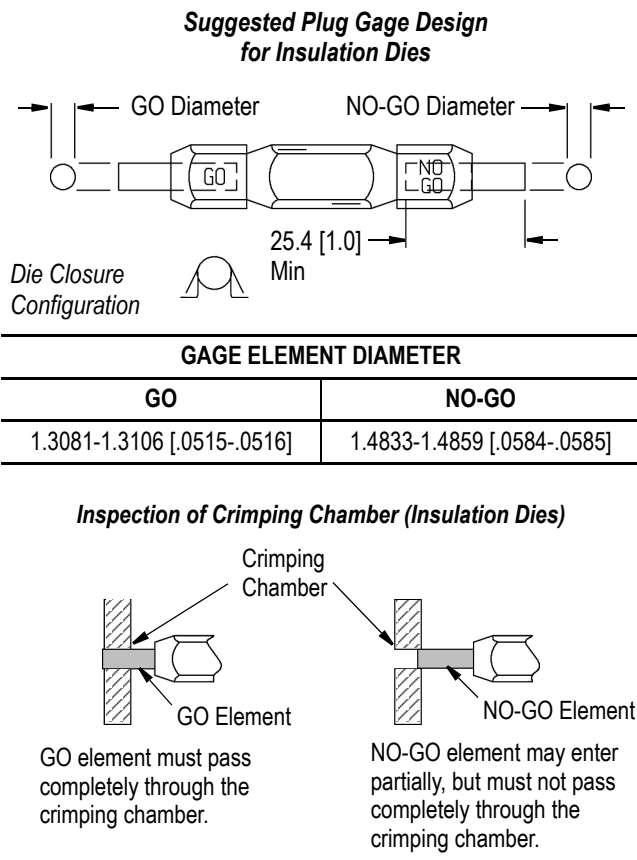


Figure 5

### 4.5. Crimp Height Inspection (Wire Dies)

This inspection requires the use of a modified micrometer with a spindle and modified anvil as shown in Figure 6. It is recommended using the Crimp Height Comparator RS-1019-5LP which can be purchased from:

Shearer Industrial Supply Co. at 717-767-7575  
VALCO at 610-691-3205

Proceed as follows:

1. Select a receptacle and maximum size wire for the receptacle.
2. Refer to Section 3, CRIMPING PROCEDURE, and crimp the receptacle accordingly.
3. Using a crimp height comparator, measure the wire barrel crimp height as shown in Figure 6. If the crimp height conforms to that height, the tool is considered dimensionally correct. If not, the tool must be returned to repair. See Section 5, REPLACEMENT AND REPAIR.

**Crimp Height Inspection (Wire Dies)**

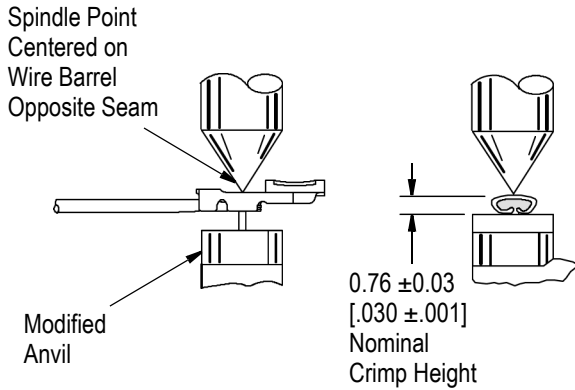


Figure 6

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

**5. REPLACEMENT AND REPAIR**

Customer-replaceable parts are listed in Figure 7.

A complete inventory should be stocked and controlled to prevent lost time when replacement of parts is necessary. Parts other than those listed should be replaced by Tyco Electronics to ensure quality and reliability. Order replacement 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:

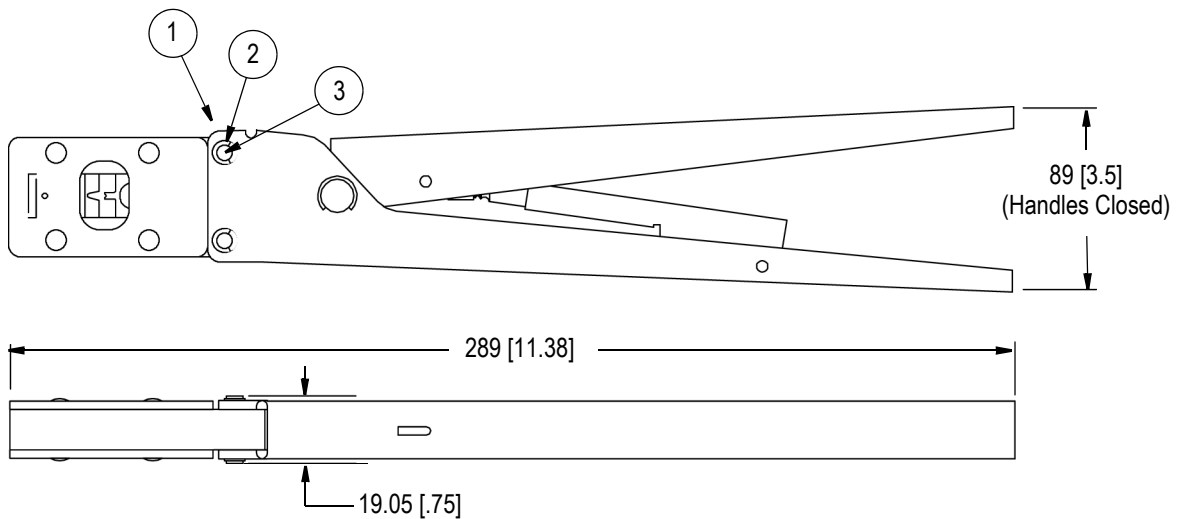
CUSTOMER SERVICE (038-035)  
TYCO ELECTRONICS CORPORATION  
PO BOX 3608  
HARRISBURG PA 17105-3608

For customer repair service, contact a representative at 1-800-526-5136.

**6. REVISION SUMMARY**

Since the last revision to this document, the following changes were made:

- Added Proper Use Guidelines to first page.
- Updated document to corporate requirements.



**REPLACEMENT PARTS**

ITEM	PART NUMBER	DESCRIPTION	QTY PER TOOL
1	125115-1	SPACER	4
2	21045-3	RING, Retaining	4
3	125077-3	PIN, Retaining	2

Figure 7