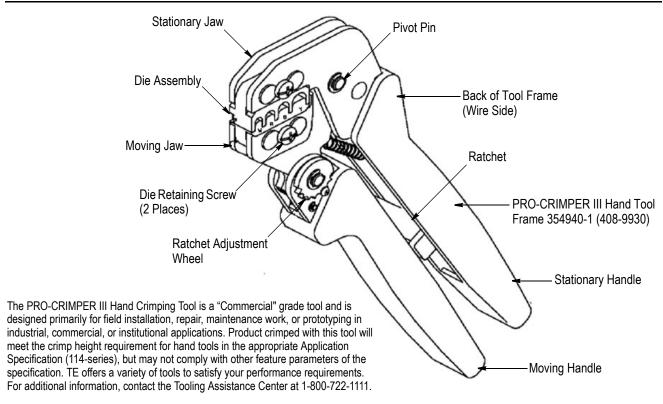
21 APR 11 Rev F

#### **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.



DIE ASSEMBLY	DIE ASSEMBLY CRIMPING CHAMBER MARKING	WIRE INSULATION DIAMETER RANGE (mm [in.])	SPARE WIRE CAP		SPARE WIRE CAP
			Standard	Moisture Resistant	COLOR CODE
58573-2	W	1.22-1.91 [.048075]	324484	324693	White
	R	2.03-2.92 [.080115]	324485	324694	Red
	В	3.05-3.68 [.120145]	324486	324695	Blue
	Υ	3.81-5.33 [.150210]	324487	324696	Yellow

Figure 1

## 1. INTRODUCTION

PRO-CRIMPER III Hand Tool Assembly 58573-1 consists of PRO-CRIMPER III Hand Tool Frame 354940-1 and Die Assembly 58573-2. The tool assembly is used to crimp the spare wire caps listed in Figure 1 onto single unstripped wire with thin copper insert and with or without a moisture-resistant inhibitor.

Read these instructions thoroughly before using the tool assembly.



Dimensions in this instruction sheet are in metric units [with U.S. customary units in brackets]. Figures are not drawn to scale.

For additional information on the hand tool frame, refer to 408-9930.

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

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

The tool consist of a stationary jaw and handle, a moving jaw and handle, and an adjustable ratchet that ensures full crimping. The tool features a ratchet adjustment wheel for adjusting the crimp height.

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



### 3. INSTALLATION AND REMOVAL OF DIE ASSEMBLY

- 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.
- 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 using the appropriate screwdriver.
- 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.

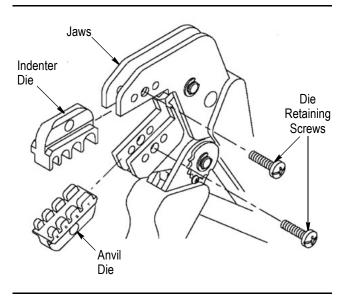


Figure 2

## 4. CRIMPING PROCEDURE

Refer to Figure 1, and select a spare wire cap for the insulation diameter of the wire being used. Then proceed as follows:

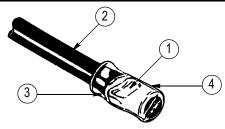
- 1. Close the tool handles until the ratchet releases, then allow the handles to open FULLY.
- 2. Identify the color code of the spare wire cap, and insert the spare wire cap into the crimping chamber with the same color code. Make sure that the spare wire cap is fully inserted.
- 3. Begin closing the tool handles until the spare wire cap is held firmly in place. DO NOT deform the cap.
- 4. Insert the unstripped wire completely into the spare wire cap. When bottoming the wire in a moisture-resistant spare wire cap, greater insertion force must be exerted on the wire to displace the inhibitor in the spare wire cap.

- 5. Close the tool handles until the ratchet releases.
- 6. Allow the tool handles to open FULLY, and turn the spare wire cap and wire one quarter of a turn while pulling lightly on the wire until the spare wire cap is free from the crimping chamber.
- 7. Refer to Figure 3, and inspect the crimped spare wire cap for the following:
- The crimp should be near the center of the insert in the spare wire cap, and the wire should be bottomed in the spare wire cap.
- Double check that the correct spare wire cap was used for the wire insulation diameter, and make sure that the correct crimping chamber was used.

If the spare wire cap fails inspection, cut the wire from the spare wire cap, then apply a new spare wire cap to the wire by carefully following the crimping procedure.



DO NOT use defective or damaged products.



- 1 Crimp near center of insert; spare wire cap was fully bottomed in closed dies.
- 2 Correct wire insulation diameter for spare wire cap was used.
- 3 Wire bottomed in spare wire cap.
- 4 Spare wire cap insulation color matches die crimping chamber marking.

Figure 3

### 5. RATCHET ADJUSTMENT

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 lockscrew from the ratchet adjustment wheel. Refer to Figure 4.
- 2. Using 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.

Rev F 2 of 4



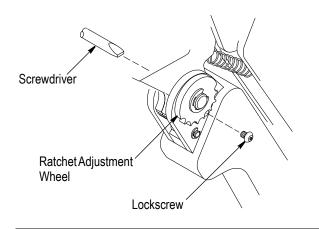


Figure 4

- 4. Re-install 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

- 1. 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.
- 2. When not in use, keep tool handles closed to prevent objects from becoming lodged in the dies, and store in a clean, dry area.
- 3. Remove all lubrication and accumulated film from the dies by immersing the dies in a suitable commercial degreaser.

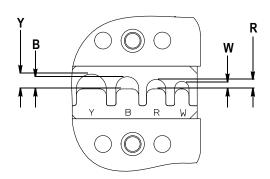
## 6.2. Visual Inspection

- 1. Inspection of the tool and dies should be made on a regular basis to ensure that they have not become worn or damaged.
- 2. Make sure that the proper die retaining screws are properly secured.
- 3. Inspect the crimping chambers of the die assembly for flattened, chipped, worn, or broken areas. If damage or abnormal wear is evident, the dies must be replaced. Refer to Section 7, REPLACEMENT AND REPAIR.

## 6.3. Measuring Die Opening

The tool assembly will perform correctly as long as:
(1) the product specified is correct for the die
assembly, (2) the correct product is used in the
matching crimping chamber of the die assembly,
(3) the die assembly has been measured to ensure
that the openings are correct, and (4) the dies bottom
on each other.

Figure 5 provides dimensions for the die openings.



**Note:** Not to Scale

DIE	DIE OPENING DIMENSION (mm [in.])					
ASSEMBLY	W	R	В	Y		
58573-2	1.83 [.072]	2.26 [.089]	2.95 [.116]	3.61 [.142]		

Figure 5

### 7. REPLACEMENT AND REPAIR

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, tool assembly, and die assembly 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:

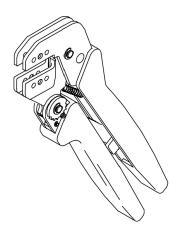
Changed company logo

Rev F 3 of 4



# Tooling Compatible with Die Assembly 58573-2

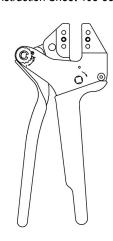
PRO-CRIMPER III Hand Tool Frame 354940-1 (Instruction Sheet 408-9930)



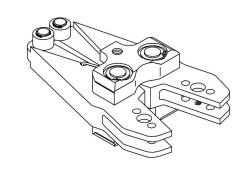
SDE Bench Terminator 1490076-2 (Customer Manual 409-10052)



**SDE-SA Hand Tool 9-1478240-0** (Instruction Sheet 408-8851)

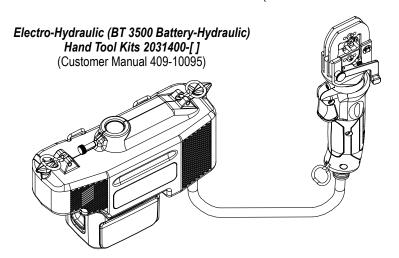


**626 Adapter 679304-1** (Instruction Sheet 408-4070)



Closed Head Assembly 2031460-1 (Instruction Sheet 408-10312)

"C"-Head Assembly 2031450-1 (Instruction Sheet 408-10311)





Rev F 4 of 4