

#### **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.

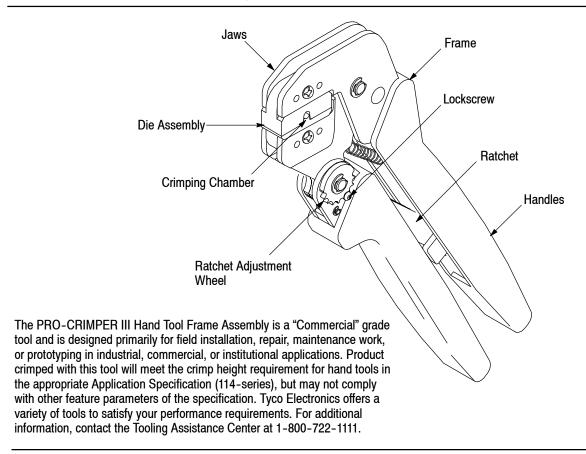


Figure 1

### 1. INTRODUCTION

PRO-CRIMPER III Hand Tool Frame Assembly 58433-4 is designed to crimp OPTIMATE\* connectors onto fiber optic cable. See Figure 1.



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

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

# 2. DESCRIPTION

The tool consists of a frame, handles, jaws, ratchet, and die assembly having a single crimping chamber. The die assembly is marked with the part number and "OPTIMATE 2.5 mm". The tool features a ratchet adjustment wheel for adjusting the crimp height.

The die assembly is also available separately. The tool frame also accepts other die assemblies designed for PRO-CRIMPER III hand tool frames.

## 3. CRIMPING PROCEDURE

- 1. Prepare the cable and connector according to the instructions packaged with the connector.
- 2. Squeeze the tool handles until the ratchet releases, then allow them to open fully.
- 3. Place the connector in the crimping chamber so that the flange at the front of the support sleeve rests against the side of the dies. See Figure 2.
- 4. Squeeze the tool handles until the ratchet releases, then allow them to open. Remove the crimped connector and cable.
- 5. Clean any epoxy from the die assembly.

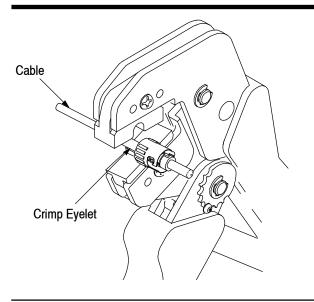


Figure 2

#### 4. INSPECTION

### 4.1. Visual Inspection

- 1. Inspect the tool frame and die assembly on a regular basis to ensure that they have not become worn or damaged.
- 2. Inspect the crimping chamber of the die assembly for flattened, chipped, worn, or broken areas. If damaged, replace the die assembly.

# 4.2. Ratchet Inspection

The ratchet mechanism of the tool features an adjustment wheel with eight settings. The ratchet adjustment wheel controls the amount of handle pressure exerted on the die assembly during the crimping procedure. Although the ratchet is adjusted and preset before shipping, general use and subsequent wear may cause it to go out of adjustment. It is recommended that the ratchet be inspected, and adjusted if necessary as follows:

1. Measure the crimp height of a connector crimp eyelet (shown in Figure 2), or a 4.75 [.187] diameter solder rod, or a copper wire size 6 AWG (having an insulation diameter of 4.11 [.162]).

If the crimp height measures  $3.56\pm0.1$  [.140 $\pm$ .004], the ratchet is considered properly set.

If the crimp height is unacceptable, open the tool handles, and remove the lockscrew (shown in Figure 1) from the base of the ratchet adjustment wheel (this will allow the wheel to be rotated). If the crimped diameter is too large, turn the wheel counterclockwise to the next higher notch (tighter). If the crimped height is too small (which is unlikely), turn the wheel clockwise to the next lower notch (looser).

2. Re-install and tighten the lockscrew.



For other die assemblies, the ratchet adjustment wheel might need to be adjusted in order to meet the crimping specifications.

#### 5. REPLACEMENT AND REPAIR

Order replacement parts through a 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 (38-35) TYCO ELECTRONICS CORPORATION PO BOX 3608 HARRISBURG, PA 17105-3608

#### **6. REVISION SUMMARY**

Revisions to this instruction sheet include:

- Updated instruction sheet to corporate requirements
- Added paragraph to Figure 1
- Changed button head socket cap screw and hex head cap screw in Paragraph 4.2 to lockscrew