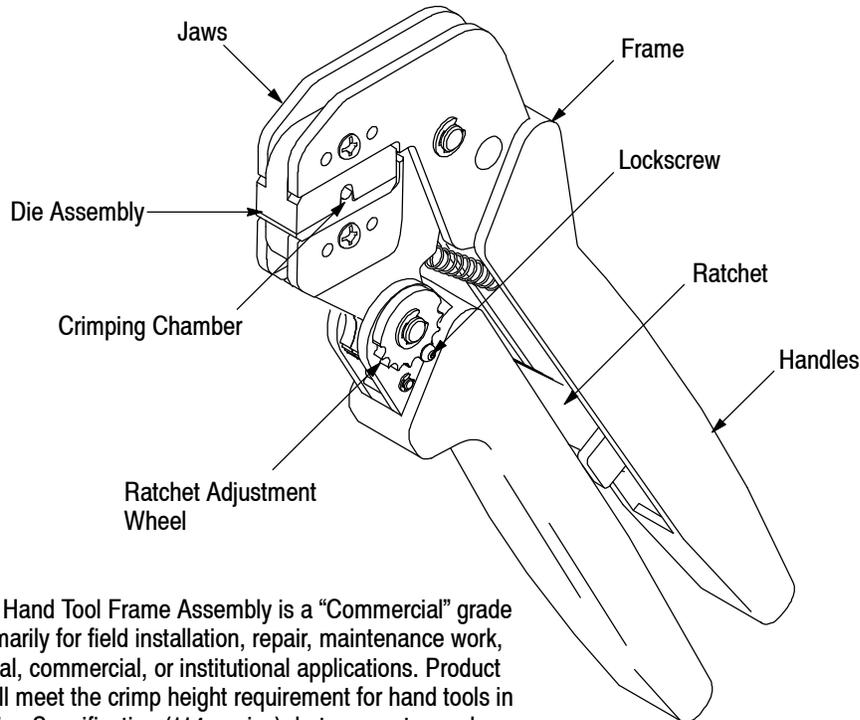


**PROPER USE GUIDELINES**

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.

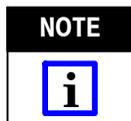


The PRO-CRIMPER III Hand Tool Frame Assembly is a “Commercial” grade tool and is designed primarily for field installation, repair, maintenance work, or prototyping in industrial, commercial, or institutional applications. Product crimped with this tool will meet the crimp height requirement for hand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

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.

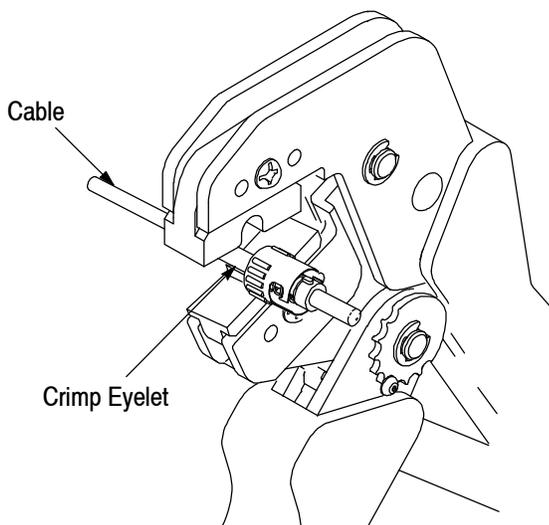


Figure 2

## 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  $3.56 \pm 0.1$  [.140  $\pm$  .004], the ratchet is considered properly set.

If the crimp height is unacceptable, open the tool handles, and remove the lock screw (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 lock screw.

#### NOTE



*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 lock screw