

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 is available for extended-use production operations.



Figure 1: Heavy Head Hand Tool 2379255-1

Handle

3

Ratchet

6



1. INTRODUCTION

The Heavy Head Hand Tool 2379255-1 (Figure 1) is designed to crimp DEUTSCH stamped PIN and Socket contacts onto the wires listed in Table 1.

Crimp tool	Terminal	Wire type	Insulation range	Insulation selector	Strip length
2379255-1	1060-12-02 (pin) 1062-12-02(socket)	10 TXL	3.81-5.21 [.150205]	1	6.35 ± 0.64 [.250 ± .025]
		10 GXL		2	
		10 SXL		3	
		5.0 mm ²		2	
		6.0 mm ²		3	

Table 1: Crimping specifications



NOTE

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

Read these instructions thoroughly before crimping connectors.

2. DESCRIPTION

The Heavy Head Hand Tool consists of a crimp head containing two stationary crimping dies (anvils), two moveable dies (crimpers), a locator, an insulation crimping adjustment pin, and handles with a ratchet. See Figure 1.

This tool is a member of the CERTI-CRIMP[™] hand crimping tool family. The ratchet on this tool ensures full crimping of the product. After it is engaged, the ratchet does not release until the handles are fully closed.

When closed, the crimping dies form a crimping chamber with two sections: an insulation barrel section and a wire barrel section. The insulation barrel section crimps the insulation barrel of the product onto the wire insulation. Simultaneously, the wire barrel section crimps the wire barrel of the product onto the wire conductors.

The locator positions the product in the crimping chamber. The insulation crimping adjustment pin is used to regulate the height of the insulation crimp.



CAUTION

The dies bottom before the ratchet releases. This feature ensures maximum tensile performance of the crimp. **Do not** readjust the ratchet.



3. CRIMPING

- 1. Select a wire of the correct size and insulation diameter for the terminal (see Table 1).
- 2. Strip the wire to the length listed in Table 1. Do not nick or cut wire strands.



CAUTION

Do not use wire with nicked or missing conductors.

3. Use Table 2 to determine the insulation setting.

Table 2:	Insul	ation	setting

Insulation size	Insulation setting
3.81-4.32 [.150170]	1
4.06-4.57 [1.60180]	2
4.32-5.21 [.170205]	3

4. Insert the insulation crimp adjustment pin in the position for the insulation setting (Figure 2).



Figure 2: Insulation crimp adjustment pin

- 5. Close the tool handles until the ratchet releases.
- 6. Allow the handles to open fully. The crimping dies open.



7. Place the terminal in the locator so that the raised collar on the terminal body is bottomed in the locator (Figure 3).



CAUTION

Make sure that both sides of the wire barrel are started evenly into the crimping section. **Do not** attempt to crimp an improperly positioned contact.

Figure 3: Terminal locator (section view)



- 1 Terminal locator
- 2 Terminal
- 8. Close the handles of the tool until the contact is lightly held by the die set, but is not deformed to the point where the wire cannot enter freely.
- 9. Insert the wire into the crimp barrel of the contact, centering the insulation in the transition area of the terminal.



CAUTION

Do not allow the insulation to enter the terminal wire barrel.

- 10. While holding the wire in place, fully cycle the tool until the ratchet releases.
- 11. Release the tool handles and allow the handles to open fully.
- 12. Remove the crimped terminal.
- 13. Inspect the crimp as described in section 4. Do not use terminals that fail to meet the described conditions.



4. INSPECTING THE CRIMP HEIGHT

Crimp height inspection is performed using a micrometer with a modified anvil, commonly referred to as a crimp-height comparator. TE Connectivity does not manufacture or market crimp height comparators. Detailed information on obtaining and using crimp-height comparators can be found in instruction sheet 408-7424.

- 1. Refer to Table 1 and select a wire (maximum size) for each crimp section listed.
- 2. Refer to section 3, CRIMPING, and crimp the contacts accordingly.
- 3. Using a crimp height comparator, measure the wire barrel crimp height. If the crimp height conforms to the value listed in Table 3, the tool is considered dimensionally correct.



CAUTION

Do not use damaged product. If a damaged contact is evident, replace it. Do not re-terminate contacts.



- 1 Modified anvil
- 2 Position point on center of wire barrel opposite seam
- **3** Crimp height (see Table 3)

Wire type	Insulation selector		Wire crimp height	Wire crimp width	Insulation crimp height	Insulation crimp width
10 TXL	1	3.81-4.32 [.150170]		3.56-3.71 [.140146]	3.68-4.19 [.145165]	4.11-4.42 [.162174]
10 GXL	2	4.06-4.57 [.160180]	2.44-2.59		4.27-4.52 [.168178]	
10 SXL	3	4.32-5.21 [.170205]	[.096102]		4.32-4.83 [.170190]	4.17-4.47 [.164176]
5.0 mm ²	2	4.06-4.57 [.160180]			3.68-4.19 [.145165]	4.11-4.42 [.162174]
6.0 mm ²	3	4.32-5.21 [.170205]	2.49-2.64 [.098104]	3.61-3.76 [.142148]	4.44-4.95 [.175195]	4.17-4.47 [.164176]

Table 3: Crimp height specifications



5. MAINTENANCE AND INSPECTION

5.1. Maintenance

- Remove dust, moisture, and other contaminants with a clean, soft brush or soft, lint-free cloth. **Do not** use objects that could damage the dies or tool.
- When the tool is not in use, keep the handles closed to prevent objects from becoming lodged in the dies.
- Remove all lubrication and accumulated film by immersing the dies in a suitable commercial degreaser.
- Store the tool in a clean, dry area.

5.2. Visual inspection

- Inspect the tool and dies on a regular basis to ensure that they are not worn or damaged.
- Make sure that the die retaining screws are properly secured.
- Inspect the crimping chambers of the die assembly for flattened, chipped, worn, or broken areas.
- If damage or abnormal wear is evident, replace the tool or dies. Refer to section 6, REPLACEMENT AND REPAIR.

6. REPLACEMENT AND REPAIR

If the dies are damaged or worn excessively, they must be replaced. Order replacement dies through your TE representative. You can also order parts by any of the following methods:

- Go to TE.com and click the Shop TE link at the top of the page.
- Call 800-522-6752.
- Write to:

CUSTOMER SERVICE (038-035) TE CONNECTIVITY CORPORATION PO BOX 3608 HARRISBURG PA 17105-3608

For customer repair services, call 800-522-6752.

7. REVISION SUMMARY

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

- Corrected errors in Table 3
- Reformatted to conform to current standard