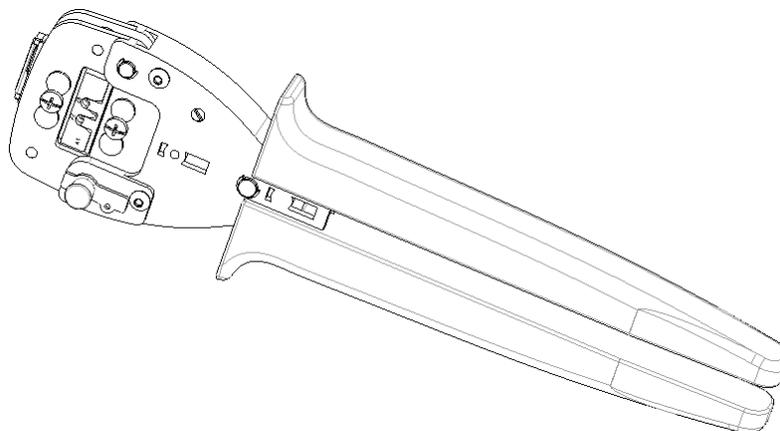


PROPER USE GUIDELINES

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.



This die is a "commercial" grade die 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 114 Series Application Specification, but may not comply with other feature parameters of the specification. TE Connectivity (TE) offers a variety of tools to satisfy your performance requirements. For additional information, call the number at the bottom of this page.

Part Number			Wire Dimension Inch [mm]		
Tool	Die	Contact	Size [mm ²]	Insulation Diameter	Strip Length
2844481-1	2844481-2	2238026-2	20 AWG [0.52]	.098-.106 [2.50-2.70]	.257 ± .020 [6.53 ± 0.50]
			22 AWG [0.32]	.094-.098 [2.40-2.50]	
2844482-1	2844482-2		16 AWG [1.30]	.118-.126 [3.00-3.20]	
			18 AWG [0.82]	.106-.114 [2.70-2.90]	
2844483-1	2844483-2		12 AWG [3.30]	.153-.157 [3.90-4.00]	
			14 AWG [2.10]	.133-.141 [3.40-3.60]	

Figure 1

1. INTRODUCTION

The tools described in this document are designed to crimp the contact/wire combinations listed in Figure 1.

The tools contain die parts that are designed to be used in the 4-1579000-5 frame only and are not designed to function in other tool frames or die adapters. **Do not attempt to use the dies contained in these tools with any other frame or die adapter.**

2. DESCRIPTION

Die components are shown in Figure 1.



NOTE

Dimensions in this Instruction Sheet are in inches [with millimeters in brackets]. Figures are not drawn to scale.

3. REMOVAL OF DIE ASSEMBLY



NOTE

The die components used in this tool are designed specifically to be used in frame 4-1579000-5 and are not compatible with other tool frames.

A. Upper Tooling [FIGURE 2]

1. Open the tool by cycling the handles until the point of ratchet release; allowing the frame to open fully.
2. Remove the nut securing the upper tooling components to the frame (located on the back side) and remove the Upper Locator and the Upper Locator Spacer.
3. Loosen and remove the Screw holding the upper tooling to the frame.
4. Pull the Latch Head Pin away from the frame to allow the Upper Tooling Holder to pivot away from the lower tooling.



NOTE

The Latch Head Pin is captive and cannot be fully removed.

5. Remove both upper .512 Long Die Pins and slide the three upper die components out of the frame.

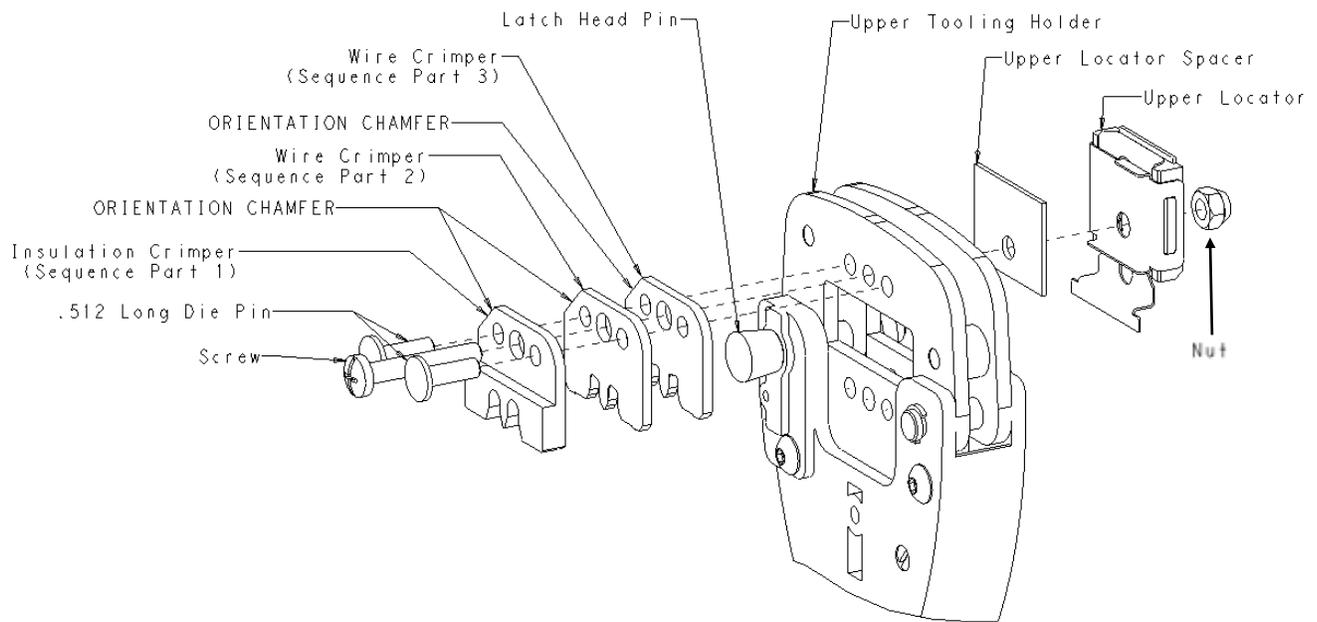


Figure 2

B. Lower Tooling [FIGURE 3]



NOTE

Under normal circumstances, it will be unnecessary to remove the lower tooling (including the Lower Support Block) from the frame. When converting the tool to a different wire range, the lower tooling will not change.

1. Open the tool by cycling the handles until the point of ratchet release; allowing the frame to open fully.
2. Remove the nut securing the lower tooling components to the frame (located on the back side) and remove the Lower Support Block.
3. Loosen and remove the Screw securing the lower tooling to the frame.

- Pull the Latch Head Pin away from the frame to allow the Upper Tooling Holder to pivot away from the lower tooling.



NOTE

The Latch Head Pin is captive and cannot be fully removed.

- Remove both lower .557 Long Die Pins and slide the two lower die components out of the frame.

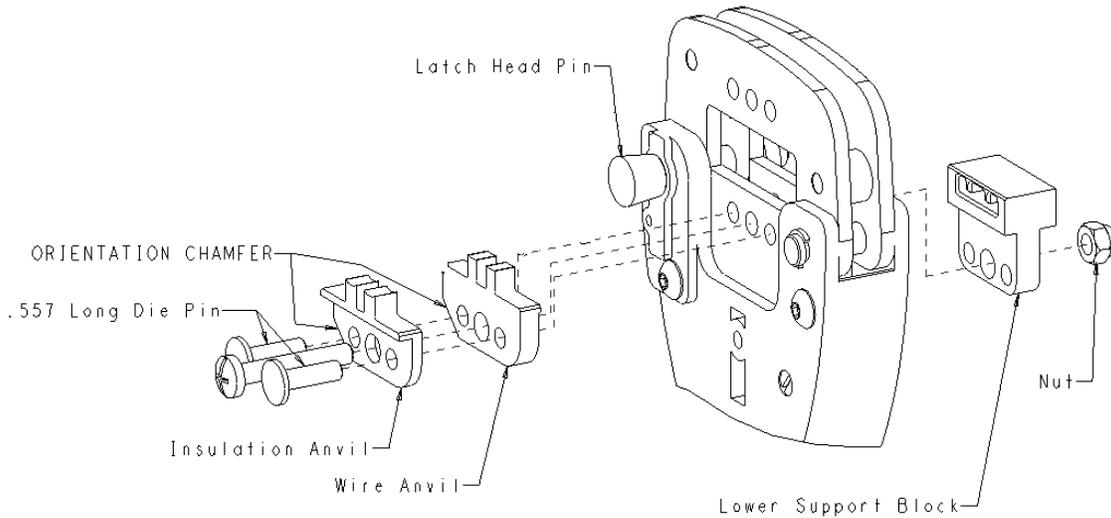


Figure 3

4. INSTALLATION (REASSEMBLY) OF DIE ASSEMBLY

A. Lower Tooling [FIGURE 3]



CAUTION

Special care must be taken during the reassembly of the lower tooling. Attempting to cycle the tool with incorrectly installed lower tooling will cause irreparable damage to both the upper and lower tooling. **Take note of proper order and orientation of lower tooling components as shown in Figure 4 before reassembly.**

Reassembly is performed in reverse order from removal. See **CAUTION** note above.

B. Upper Tooling [FIGURE 2]



CAUTION

Special care must be taken during the reassembly of the upper tooling. Attempting to cycle the tool with incorrectly installed upper tooling will cause irreparable damage to both the upper and lower tooling. **Take note of proper order and orientation of upper tooling components as shown in Figure 4 before reassembly.**



CAUTION

Failure to properly sequence the Insulation and Wire Crimpers during assembly of upper tooling or mixing components from within the die family will result in a crimp that does not conform to TE standards. **Take note of proper order and orientation of upper tooling components as shown in Figure 4 before reassembly.**

- Open the tool by cycling the handles until the point of ratchet release; allowing the frame to open fully.
- Pull the Latch Head Pin away from the frame to allow the Upper Tooling Holder to pivot away from the lower tooling.



NOTE

The Latch Head Pin is captive and cannot be fully removed.

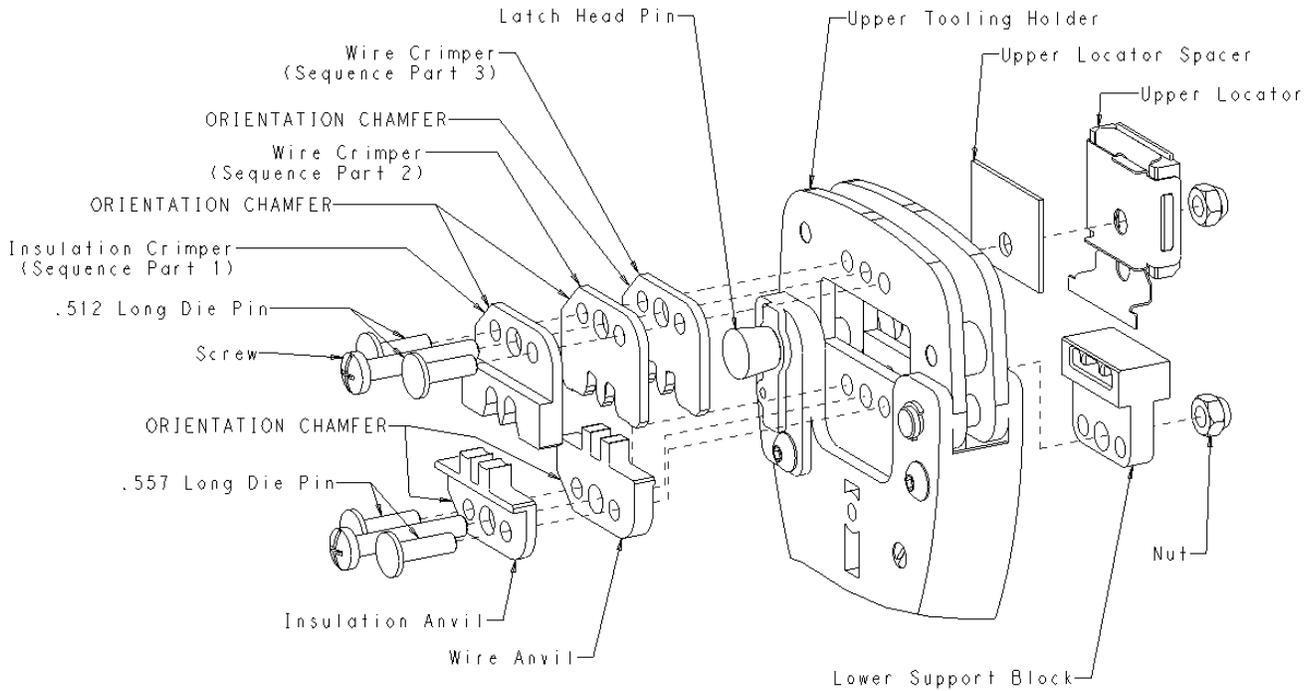


Figure 4

3. Verify that all tooling components to be installed are marked with the same die part number. Stack the components together in the proper sequence and orientation (see Figure 5), and then slide them into the Upper Tooling Holder.

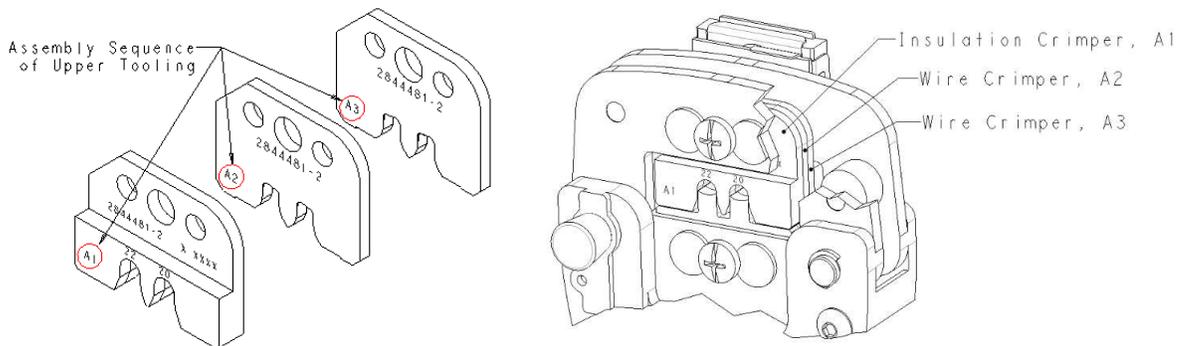


Figure 5

4. Align the pin holes of the die with the pin holes in the frame and insert both Upper .512 Long Die Pins.
5. Insert Screw fully until it is tight against the heads of the die pins.
6. Install the Upper Locator Spacer and the Upper Locator (in that order) and secure with the nut.

5. CONVERTING A TOOL TO A DIFFERENT WIRE SIZE

Any of the three tools listed in this instruction sheet may be easily converted to crimp another of the wire ranges listed in Figure 1. To do so, simply replace the insulation crimper and both wire crimpers with that of another tool listed in Figure 1.

Sets of crimpers may be purchased individually (reference Figure 6).

Wire Size [mm ²]	Die Number	Component	Sequence Marking
20 AWG [0.52] 22 AWG [0.32]	2844481-2	Insulation Crimper	A1
		First Wire Crimper	A2
		Second Wire Crimper	A3
16 AWG [1.30] 18 AWG [0.82]	2844482-2	Insulation Crimper	B1
		First Wire Crimper	B2
		Second Wire Crimper	B3
12 AWG [3.30] 14 AWG [2.10]	2844483-2	Insulation Crimper	C1
		First Wire Crimper	C2
		Second Wire Crimper	C3

Figure 6

6. CRIMPING PROCEDURE



NOTE

Before using the tool, the contact crimp height should be verified as described in Section 6.

1. Refer to Figure 1 and select the appropriate wire and crimp nest for the contact to be crimped.
2. Strip the wire to the length indicated in Figure 1. **DO NOT nick or cut wire strands.**
3. Ensure the tool is fully opened.
4. Grasp the contact by the insulation barrel.
5. Insert the contact through the die into the Lower Support Block until the front edge of the wire barrel rests against the spring loaded blade of the Upper Locator.



CAUTION

Make sure the contact is **fully inserted** into the tool and resting against the spring loaded blade of the Upper Locator. **DO NOT attempt to crimp an improperly positioned contact.**

6. Insert the stripped wire into the wire barrel until it butts against the wire stop as shown in Figure 7.

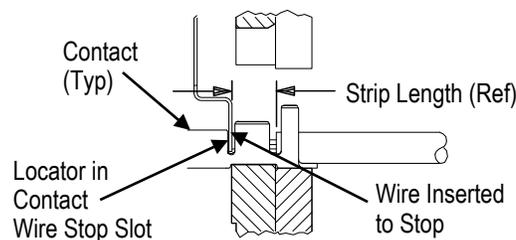


Figure 7

7. Holding the wire in place, complete the crimp by actuating the ram until the ratchet completes its cycle and allows the tool open. Remove the crimped contact.



NOTE

The crimped contact may stick in the crimping area, but the contact can be easily removed by pushing down on the top of the Locator.

7. CRIMP HEIGHT INSPECTION



NOTE

In order to inspect wire crimp height, the terminal must be cross-sectioned and examined under a calibrated microscope with measurement capability. Refer to TE Application Specification 114-106199 for additional information.

8. TOOL MAINTENANCE AND INSPECTION

8.1. Maintenance

1. Ensure that the tool 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. Remove all lubrication and accumulated film from the dies by immersing the dies in a suitable commercial degreaser.

8.2. Visual Inspection

1. Inspection of the tool and dies should be made on a regular basis to ensure they have not become worn or damaged.
2. Make sure the (die retaining) Screws are properly secured.
3. Inspect the crimping chamber 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 9.

9. REPLACEMENT

If the dies are damaged or worn excessively, they must be replaced. Order dies through your TE representative; call 1-800-522-6752, send a facsimile of your purchase order to 717-986-7605, or write to:

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

10. REVISION SUMMARY

- ◆ Initial Release