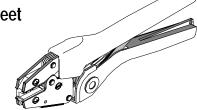


Hand Crimp Tool Operating Instruction and Specifications Sheet Part No. 64003-0400 Eng. No. RHT 1753 (Replaces 19284-0012)



FEATURES

- A full cycle ratcheting hand tool ensures complete crimps
- Long handles for comfortable crimping with reduced crimping force
- A precision user-friendly terminal locator / wire stop holds terminals in the proper crimping position

SCOPE

<u>Products</u>: Krimptite™ Terminals and Quick Disconnects 24–26 AWG.

Testing

Mechanical

The tensile test, or pull test, is a means of evaluating the mechanical properties of the crimped connections. The following charts show the UL specifications for various wire sizes. The tensile strength is shown in pounds and indicates the minimum acceptable force to break or separate the terminal from the conductor.

| Wire Size (AWG) | *UL - 486 A | *UL - 310 |
|-----------------|-------------|-----------|
| 26 | 3 | 3 |
| 24 | 5 | 5 |

*UL - 486 A - Terminals (Copper conductors only)
*UL - 310 Quick Disconnects, Flags, Couplers

The following is a partial list of the product part numbers and their specifications that this tool is designed to run. We will be adding to this list and an up to date copy is available on www.molex.com.

| Wire Size: 24 – 26 AWG 0.20 – 0.12 mm ² | | | |
|--|------------------|-------------------|------|
| Terminal No. | Terminal Eng No. | Wire Strip Length | |
| Terrificativo. | (REF) | In | mm |
| 19016-0075 | M-1130 | .156 | 3.97 |
| 19016-0098 | M-1136 | .156 | 3.97 |
| 190160-099 | M-1136-032 | .156 | 3.97 |
| 19016-0112 | M-1133 | .156 | 3.97 |
| 19069-0352 | M-1113-02 | .156 | 3.97 |
| 19069-0354 | M-1113-04 | .156 | 3.97 |
| 19069-0356 | M-1113-06 | .156 | 3.97 |
| 19069-0358 | M-1114-02 | .156 | 3.97 |
| 19069-0361 | M-1118-06 | .156 | 3.97 |
| 19069-0363 | M-1118-08 | .156 | 3.97 |
| 19069-0365 | M-1118-10 | .156 | 3.97 |
| 19069-0367 | M-1120-04 | .156 | 3.97 |
| 19069-0369 | M-1122-00 | .156 | 3.97 |
| 19069-0370 | M-1122-02 | .156 | 3.97 |

| Wire Size: 24 – 26 AWG 0.20 – 0.12 mm ² | | | |
|--|------------------|------------------|------|
| Terminal No. | Terminal Eng No. | Wire Strip Lengt | |
| | | ln | mm |
| 19069-0441 | M-1120-06 | .156 | 3.97 |
| 19087-0169 | M-1115-02 | .156 | 3.97 |
| 19087-0171 | M-1119-02 | .156 | 3.97 |
| 19087-0173 | M-1119-06 | .156 | 3.97 |
| 19087-0175 | M-1119-08 | .156 | 3.97 |
| 19087-0177 | M-1119-10 | .156 | 3.97 |
| 19118-0092 | M-1117-02 | .156 | 3.97 |
| 19141-0096 | M-1116-02 | .156 | 3.97 |
| 19141-0098 | M-1121-04 | .156 | 3.97 |
| 19141-0101 | M-1123-00 | .156 | 3.97 |
| 19141-0109 | M-1116-04 | .156 | 3.97 |
| 19141-0113 | M-1116-06 | .156 | 3.97 |
| | | | |

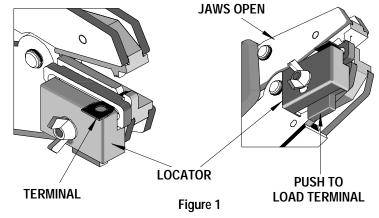
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OPERATION

Open the tool by first closing the jaws sufficiently for the ratchet mechanism to release.

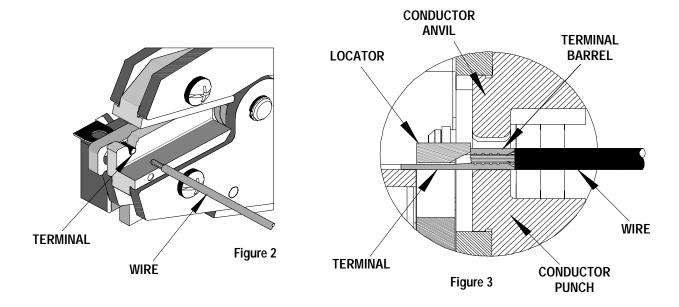
Crimping Terminals

1. Lift the locator and insert the terminal in the proper nest with the barrel up and against the locator bar. For Quick Disconnects, center the terminal barrel in the lower tooling



- visually, the locator will hold it but does not position Quick Disconnects. Release the locator blade to hold the terminal in position. See Figure 1. Locator may be raised or lowered so terminal sits flat and straight in tool.
- 2. Partially close the tool to hold the terminal in place. See Figure 2.
- 3. Insert the properly stripped wire into the terminal barrel. See Figure 2 and 3. The wires end should stop against the locator bar. Cycle the tool.

Note: The tamper proof ratchet action will not release the tool until it has been fully closed.



Note: Whenever crimping without the locator, make sure the seam of the terminal is oriented up or down in the tool if using unbrazed product, as this will provide higher pull force values.

4. Remove the crimp and inspect for proper crimp location. Locator is adjustable up and down to keep terminals straight after crimping (See Figure 1). Molex offers a Crimp Inspection Handbook for closed barrel industrial product. See our website or contact your sales engineer.

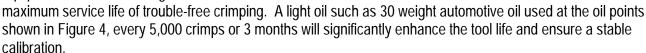
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Maintenance

It is recommended that each operator of the tool be made aware of, and responsible for, the following maintenance steps:

- 1. Remove dust, moisture and other contaminants with a clean brush, or soft, lint-free cloth.
- 2. Do not use any abrasive materials that could damage the tool.
- 3. Make certain all pins; pivot points and bearing surfaces are protected with a thin coat of high quality machine oil. Do not oil excessively. This tool was engineered for durability, but like any fine piece of equipment it needs cleaning and lubrication for a



4. When tool is not in use, keep the handles closed to prevent objects from becoming lodged in the crimping dies, and store the tool in a clean, dry area.



Should this tool ever become stuck or jammed in a partially closed position, **Do Not** force the handles open or closed. The tool will open easily by pressing the ratchet release lever.

How To Adjust Tool Preload (See Figure 5)

Over the life of the tool, it may be necessary to adjust tool handle preload force. Listed below are the steps required

to adjust the crimping force of the hand tool to obtain proper crimp conditions:

- Remove the screw and plastic cover washer. Note the setting wheel position
- 2. Lift the setting wheel off the axle. Turn the eccentric axle with a screwdriver.
- Turning the eccentric axle counterclockwise (CCW) will increase handle force.
- 4. Replace the setting wheel to the axle, aligning the nearest notch in the setting wheel to the dowel pin.
- 5. Replace the plastic cover washer and screw.
- Check the crimp specifications after tool handle preload force is adjusted.

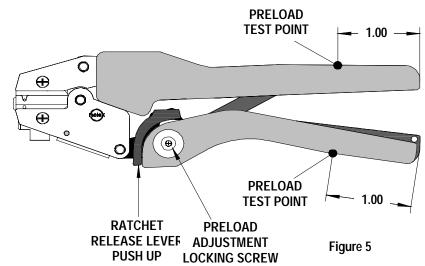


Figure 4

LUBRICATION POINTS

(BOTH SIDES) LIGHT OIL (EVERY 3 MONTHS OR

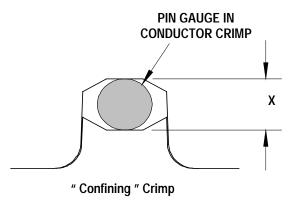
5,000 CRIMPS)

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Tool Calibration

A Certificate of Calibration (see last page) was supplied with the tool. To recalibrate this tool, a soft metal slug or solder should be crimped in the conductor nest and the "X" Dimension measured in each conductor nest and compared to this chart. The tool should be lubricated prior to recalibration to ensure consistent measurements. Handle preload is factory set to 25-45 LBS. See How to Adjust Tool Preload (See Figure 5) to recalibrate.



| Nest Color Code | Wire Range | | "X" Dimension Conductor Crimp | | |
|-----------------|------------|-------------|-------------------------------|------|-------|
| Nest Color Code | AWG | mm² | Mean | Go | No Go |
| Yellow | 24 - 26 | 0.12 - 0.20 | .042 | .039 | .050 |

Warranty

This tool is for electrical terminal crimping purposes only. This tool is made of the best quality materials. All vital components are long life tested. All tools are warranted to be free of manufacturing defects for a period of **30 days**. Should such a defect occur, we will repair or exchange the tool free of charge. This repair or exchange will not be applicable to altered, misused or damaged tools. This tool is designed for hand use only. Any clamping, fixturing, or use of handle extensions voids this warranty.

Hand held crimping tools are intended for low volume, prototyping, or repair requirements only.

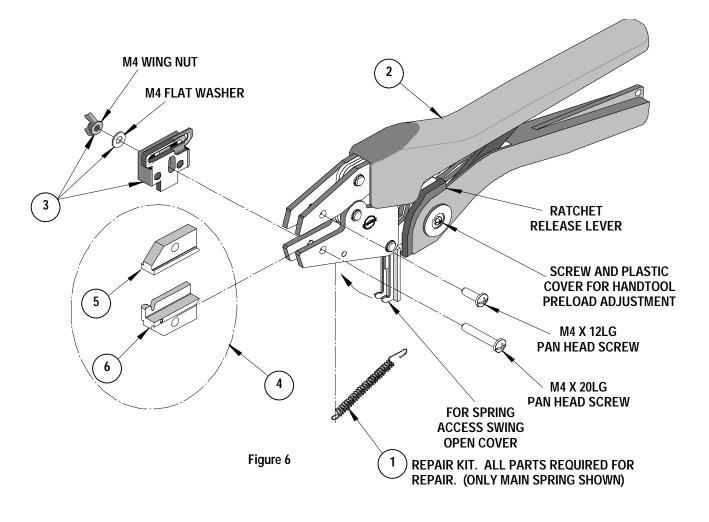
Caution: Repetitive use of this tool should be avoided.

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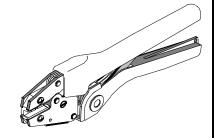
PARTS LIST

| Item | Order No | Description | Quantity | |
|------------------|------------|--|----------|--|
| | 64003-0400 | Hand Crimp Tool | Figure 6 | |
| 1 | 64000-0076 | Repair Kit (Springs, Pins and E-Rings) | 1 | |
| 2 | 63810-0000 | Handle | 1 | |
| 3 | 64007-0375 | Locator Assembly | 1 | |
| 4 | 64003-0470 | Tooling Kit | 1 | |
| Tooling Kit Only | | | | |
| 5 | 64003-0402 | Conductor Anvil | 1 | |
| 6 | 64003-0401 | Conductor Punch | 1 | |



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Certificate of Calibration

| Tool Order Number | |
|--|---|
| Tool Eng. Number | |
| Tool Revision | |
| Serial Number | |
| Date of Manufacture | |
| Handle Load Range | at 1 inch from the Tips = |
| | Actual = |
| Pin Gauge of Conductor Nest/Nests or Slug height if the ne | est is the "F" Crimp style. |
| Range Conductor Nest # 1 =Actual = | |
| Range Conductor Nest # 2 =Actual = | |
| Range Conductor Nest # 3 =Actual = | |
| Technician Date of Calibration | |
| Calibration should be done every 5,000 cycles or 3 months | s. Tools should be lubricated during this operation. |
| | |
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