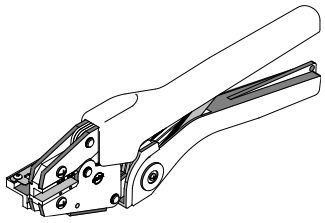
Hand Crimp Tool
Krimptite ™

molex

Application Tooling Specification Sheet



Order No. 64003-1100
Eng. No. RHT 1751

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
- 2-nested tool eliminates the need for additional tools

SCOPE

Products: Krimptite™ Female Non-Insulated Quick Disconnects, Piggybacks and Bullet Receptacles 14–22 AWG.

Testing

Mechanical

The tensile test or pull test is a means of evaluating the mechanical properties of the crimped connections. The following chart shows 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 - 310
22	8
20	13
18	20
16	30
14	50

*UL – 310 – Quick Disconnects

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: 18 – 22 AWG 0.80 – 0.35 mm²						
Terminal No.	Terminal Eng No. (REF)	LOCATOR	Wire Strip Length		Insulation Diameter Maximum	
			In.	mm	In.	mm
19016-0001	AA-1131	TAB (64007-1175)	0.25	6.35	N/A	N/A
19016-0003	AA-1134	TAB (64007-1175)	0.25	6.35	N/A	N/A
19016-0005	AA-1137	TAB (64007-1175)	0.25	6.35	N/A	N/A
19016-0006	AA-1137-032	TAB (64007-1175)	0.25	6.35	N/A	N/A
19016-0009	AA-1140	TAB (64007-1175)	0.25	6.35	N/A	N/A
19016-0110	AA-1190	TAB (64007-1175)	0.25	6.35	N/A	N/A
19037-0002	AA-1121	LOOP (64003-1275)	0.25	6.35	N/A	N/A
19037-0010	AAZ-1125	LOOP (64003-1275)	0.25	6.35	N/A	N/A
19037-0011	AAZ-1126	LOOP (64003-1275)	0.25	6.35	N/A	N/A
19037-0015	AA-1120	LOOP (64003-1275)	0.25	6.35	N/A	N/A
19273-0007	AA-1140-LIF	TAB (64007-1175)	0.25	6.35	N/A	N/A
19010-0027	AA-1301	TAB (64007-1175)	0.25	6.35	N/A	N/A

Wire Size: 14 – 16 AWG 2.00 – 1.30 mm²						
Terminal No.	Terminal Eng No. (REF)	LOCATOR	Wire Strip Length		Insulation Diameter Maximum	
			In.	mm	In	mm
19037-0004	BB-1122	LOOP (64003-1275)	0.25	6.35	N/A	N/A
19037-0006	BB-1123	LOOP (64003-1275)	0.25	6.35	N/A	N/A
19016-0035	BB-1132	TAB (64007-1175)	0.25	6.35	N/A	N/A
19016-0037	BB-1135	TAB (64007-1175)	0.25	6.35	N/A	N/A
19016-0039	BB-1138	TAB (64007-1175)	0.25	6.35	N/A	N/A
19016-0040	BB-1138-032	TAB (64007-1175)	0.25	6.35	N/A	N/A
19016-0045	BB-1191	TAB (64007-1175)	0.25	6.35	N/A	N/A
19016-0046	BB-1191-032	TAB (64007-1175)	0.25	6.35	N/A	N/A
19016-0111	BB-1141	TAB (64007-1175)	0.25	6.35	N/A	N/A
19203-0373	19203-0373	TAB (64007-1175)	0.205	5.20	N/A	N/A
19203-0390	19203-0390	TAB (64007-1175)	0.205	5.20	N/A	N/A
19273-0008	BB-1141-LIF	TAB (64007-1175)	0.25	6.35	N/A	N/A
19010-0028	BB-1302	TAB (64007-1175)	0.25	6.35	N/A	N/A

OPERATION

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

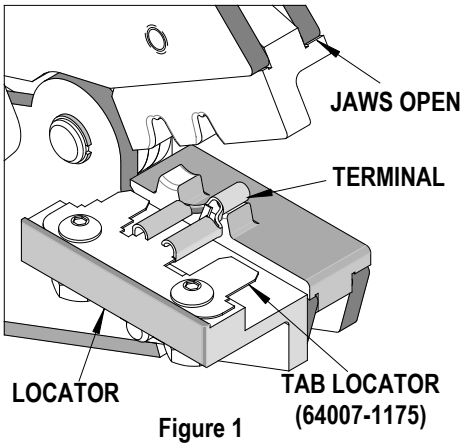


Figure 1

Crimping Female Quick Disconnects Terminals

1. There are 3 tab locator blades supplied with the tool. One is for .187 and .250 tabs; another is for .205 tabs and .110 Tabs and another for LIF terminals. Make sure the proper blade is installed on the top of the locator and the others are stored on the bottom of the locator. For proper orientation of the locator blade see Figure 1.
2. Push the terminal onto the tab locator all the way to the stop in the proper color-coded nest. The barrel of the terminal should be up
3. Partially close the tool to hold the terminal in place. See Figure 2.
4. Insert the properly stripped wire into the terminal barrel. See Figure 2 and 3. The wires end should butt against the wire stop stamped into each terminal. Cycle the tool.

Crimping Piggyback Quick Disconnect Terminals

Follow the procedure described above but the terminal must be loaded with the male tab **up** and the barrel **down**.

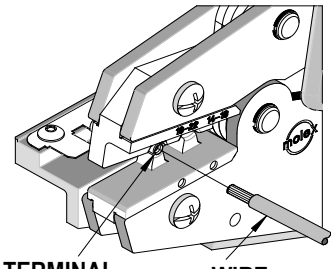


Figure 2

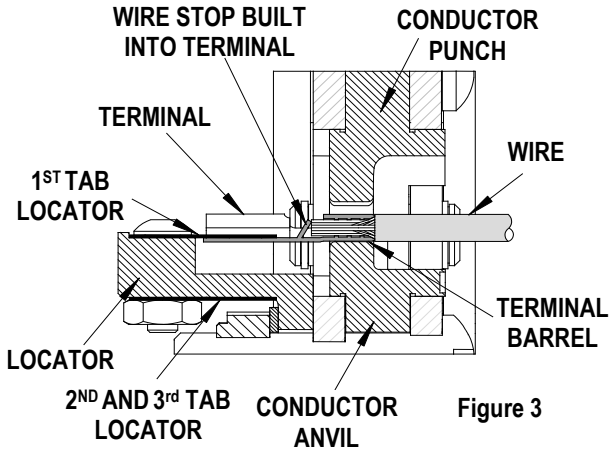


Figure 3

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

1. Remove the crimp and inspect for proper crimp location. Molex offers a Crimp Inspection Handbook for closed barrel industrial product. See our website or contact your Sales Engineer.

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.

Crimping Bullet Terminals

1. Adjust the locator up or down until the bullet terminal being crimped sits flat and straight into the tool.
2. Push up on the locator blade and insert the terminal in the proper nest with the barrel up and against the locator blade. Release the locator blade to hold the terminal in position. See Figure 4. Locator may be raised or lowered so terminal sits flat and straight in the tool.

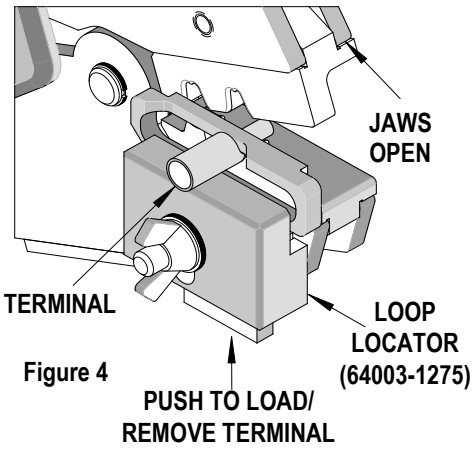


Figure 4

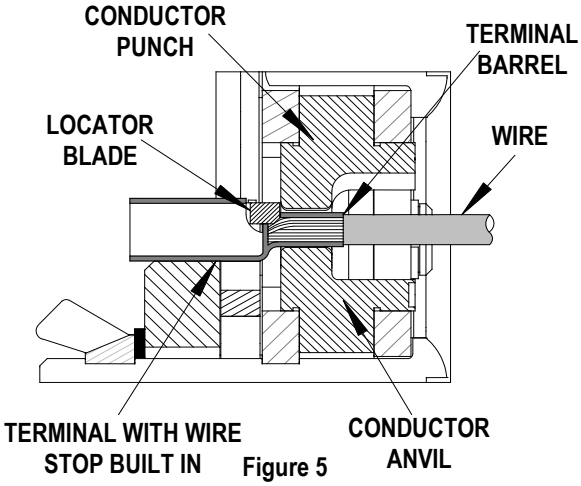


Figure 5

3. Partially close the tool to hold the terminal in place.
4. Insert the properly stripped wire into the terminal barrel. See Figure 5. The wires end should stop against the locator blade. Cycle the tool.

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

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

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.

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 maximum service life of trouble-free crimping. A light oil, such as 30 weight automotive oil used at the oil points shown in Figure 6, every 5,000 crimps or 3 months will significantly enhance the tool life and ensure a stable calibration.
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.

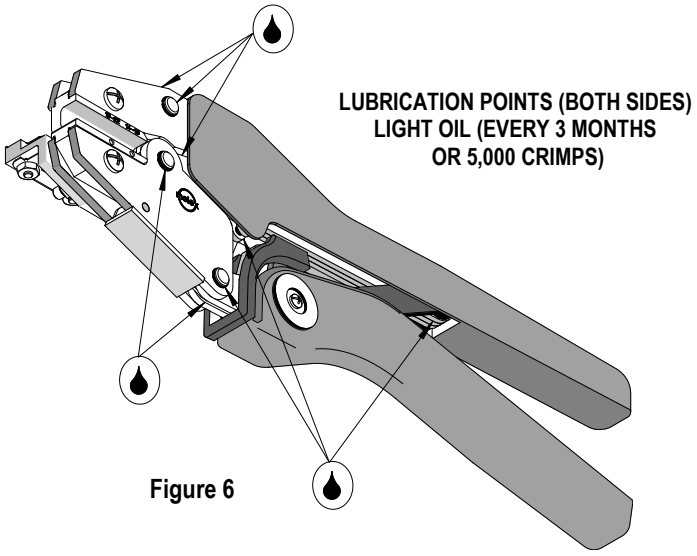


Figure 6

Miscrimps or Jams

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. See Figure 7.

How to Adjust Tool Preload (See Figure 7)

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:

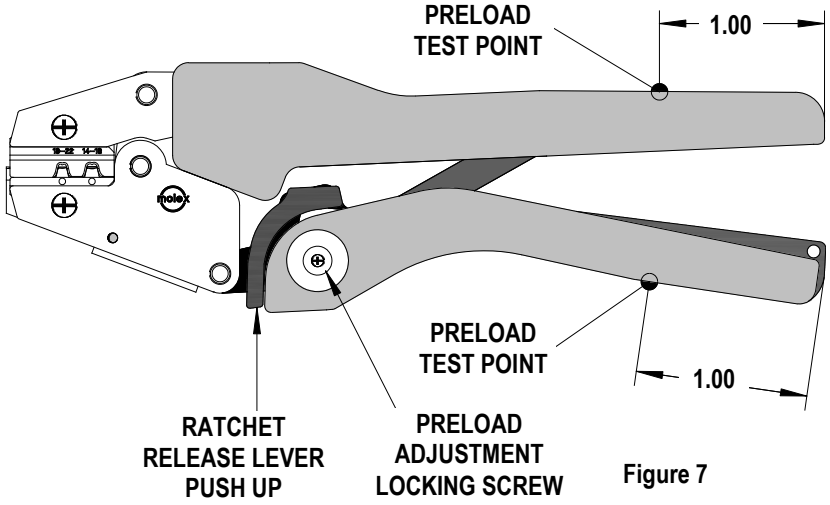
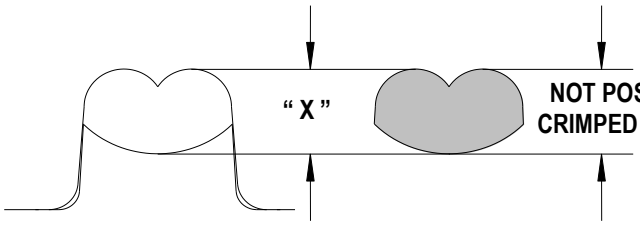


Figure 7

1. 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.
3. Turning the eccentric axle counter-clockwise 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.
6. Check the crimp specifications after tool crimp force is adjusted.

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 7) to recalibrate.



NOT POSSIBLE TO PIN GAUGE, MEASURE A CRIMPED UNINSULATED TERMINAL OR SLUG*

***SOLDER, LEAD OR SIMILAR SOFT METAL**

Nest Color Code	Wire Range		"X" Dimension Conductor Crimp		
	Awg	mm²	Mean	Go	No Go
Red	22 - 18	0.35 - 0.80	.052	.049	.060
Blue	16 - 14	1.30 - 2.00	.061	.058	.069

CAUTION: Repetitive use of this tool should be avoided.

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: Molex crimp specifications are valid only when used with Molex terminals, applicators and tooling.

PARTS LIST

Item	Order No	Description	Quantity
	64003-1100	**Hand Crimp Tool**	**Figure 6**
1	64000-0076	Repair Kit (Springs, Pins and E-Rings)	1
2	63810-0000	Handle	1
3	64007-1175	Locator Assembly	1
4	64003-1275	Locator Assembly	1
5	64003-1170	Tooling Kit	1
Tooling Kit Only			
6	64003-1101	Conductor Punch	1
7	64003-1102	Conductor Anvil	1

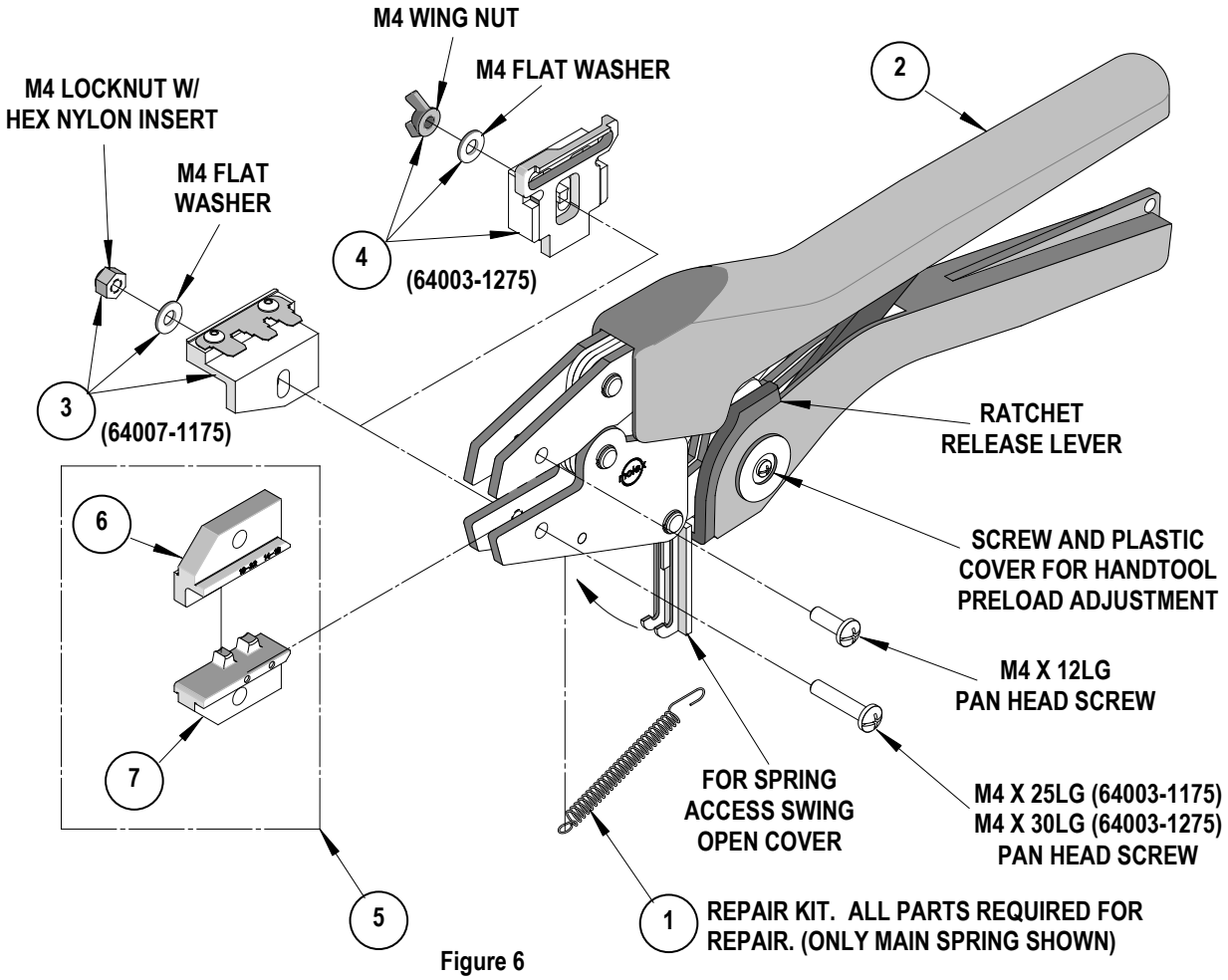


Figure 6

Hand Crimp Tool
Krimptite ™

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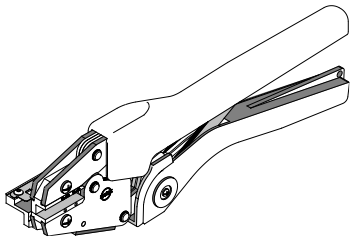
Certificate of Calibration



Order No. 64003-1100

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 nest 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.
Tools should be lubricated during this operation.

Visit our Web site at http://www.molex.com