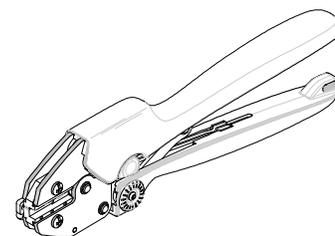




**Hand Crimp Tool
Insulkrimp™
Male Q.D.**

**Application Tooling
Specification Sheet**



Order No. 64001-8100

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
- Insulation crimp adjustment allows a precise insulation crimp to meet or exceed the requirements of UL, CSA and Military Class II

SCOPE

Products: Insulkrimp™ Male Quick Disconnect, 10 - 12 AWG.

Wire Size (AWG)	*UL - 310
10	80
12	70

*UL - 310 - Quick Disconnects

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. It indicates the minimum acceptable force to break or separate the terminal from the conductor.

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

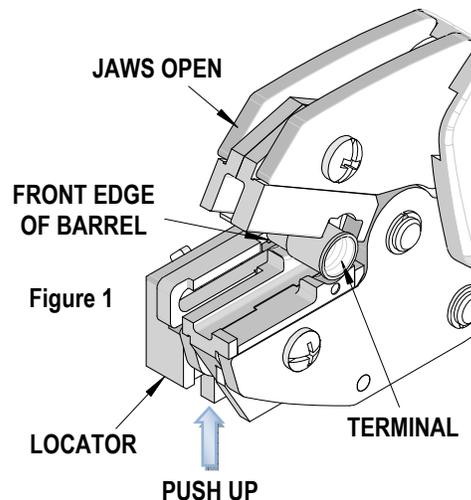
Wire Size: 10 - 12 AWG 5.00 - 3.30mm ²					
Terminal No.	Terminal Eng No. (REF)	Wire Strip Length		Insulation Diameter Maximum	
		In.	mm	In.	mm
19023-0008	CMCT-2X	.375	9.53	.250	6.35

OPERATION

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

Crimping Terminals

1. Push up on the locator blade and position the terminal with the barrel facing up into the nest with the front edge of the barrel against the locator. See Figure 1. Release the locator blade to hold the terminal in position.
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 butt against the wire stop position of the locator.



4. Cycle the tool.

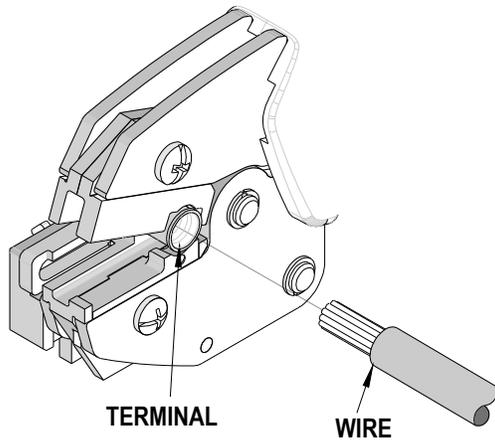


Figure 2

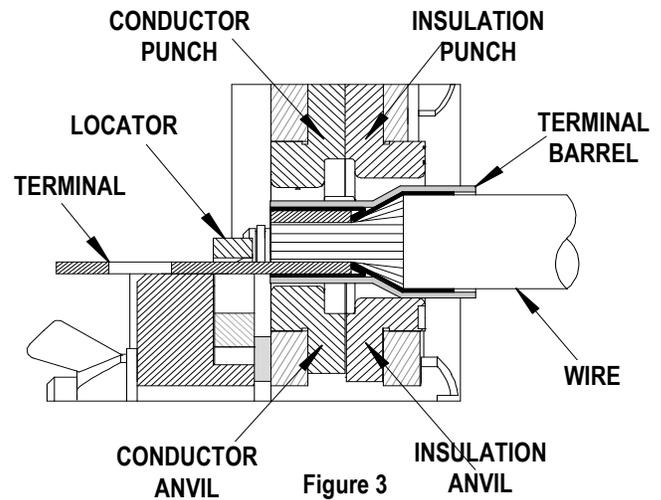


Figure 3

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

5. Lift the locator blade or wire stop and remove the crimped terminal. Inspect for proper crimp location, and check for insulation closure. The locator is adjustable, up and down, to keep the terminals straight after crimping.
6. If the insulation part of the crimp needs to be adjusted, first loosen the M4 screw on the bottom tool jaw, then insert a 3/32 hex wrench (supplied) into the bottom of the lower die. See Figure 4. A clockwise rotation decreases insulation crimp while a counter-clockwise rotation increases insulation crimp. After adjusting retighten the M4 screw.

Note: Whenever crimping without the locator, make sure the seam of the terminal is oriented up or down in the tool if using unbraided 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 4, every 5,000 crimps or 3 months will significantly enhance the tool life and ensure a stable calibration.
4. When the 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.

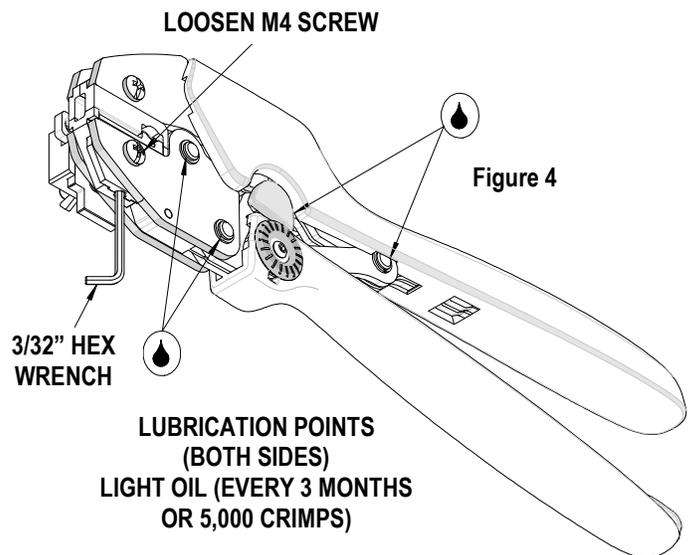


Figure 4

LUBRICATION POINTS
(BOTH SIDES)
LIGHT OIL (EVERY 3 MONTHS
OR 5,000 CRIMPS)

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 5.

How to Adjust the Tool Preload (See Fig. 5)

Over the life of the tool, it may be necessary to adjust the tool handle preload force. Listed below are the steps required to adjust the crimping force of the hand tool to obtain proper crimp conditions:

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 the 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 the tool crimp force is adjusted.

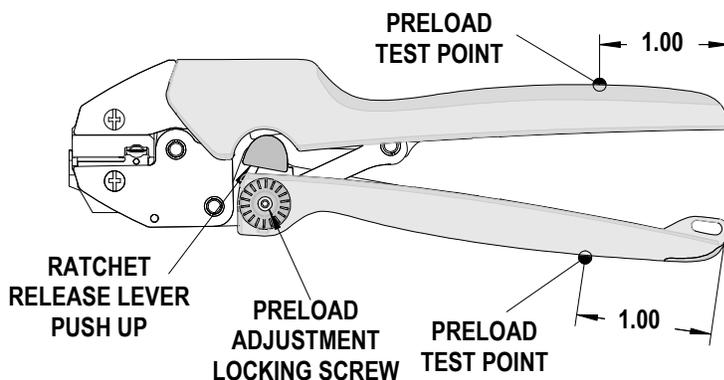
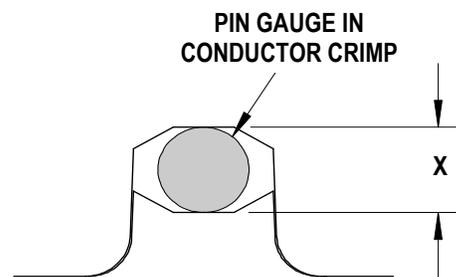


Figure 5

Tool Calibration

A Certificate of Calibration (see last page) was supplied with the tool. To recalibrate this tool, pin gauge measurements should be taken 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 the tool preload, see Figure 5 to recalibrate.



“Confining” Crimp

Nest Color Code	Wire Range		“X” Dimension Conductor Crimp			Crimp Inspection Marking
	AWG	mm ²	Mean	Go	No Go	
Yellow	10 - 12	3.30 - 5.00	.100	.097	.103	oo

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.

Caution: Repetitive use of this tool should be avoided.

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
	64001-8100	Hand Crimp Tool	Figure 6
1	64000-0076	Repair Kit (Springs, Pins and E-Rings)	1
2	63810-0000	Handle	1
3	64001-1275	Locator Assembly	1
4	64001-8170	Tooling Kit	1
Tooling Kit Only			
5	64001-8102	Conductor Punch	1
6	64001-8101	Conductor Anvil	1
7	64001-8104	Insulation Punch	1
8	64001-8103	Insulation Anvil	1
9	N/A	4mm Diameter by 5.0mm Long Roll Pins	2**
10	N/A	#10-32 by 5/16" Long Cup Pt. Set Screw	1**
** Available from an Industrial supply company such as MSC (1-800-645-7270).			

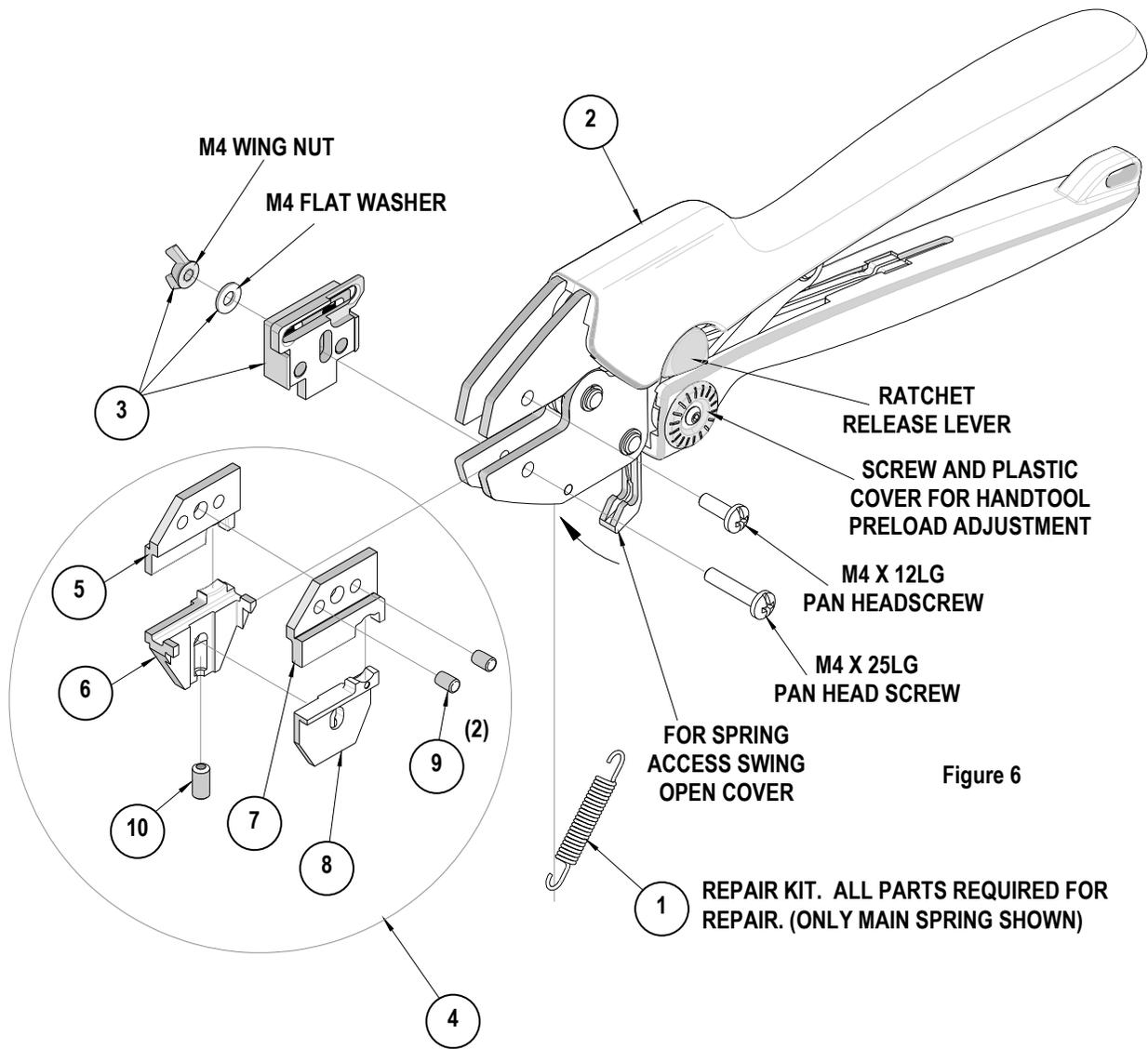
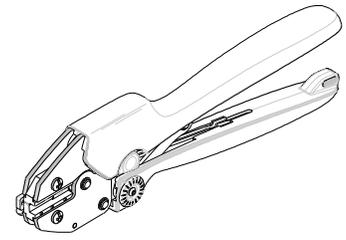


Figure 6



**Hand Crimp Tool
Insulkrimp™**

**Certificate of
Calibration**



Order No. 64001-8100

Tool Order Number 64001-8100

Tool Revision _____

Serial Number _____

Date of Manufacture _____

Handle Preload Range:

At 1 inch from the Tips = 25 – 45 lbs.

Actual = _____

Pin Gauge of Conductor Crimp Nest:

Conductor Nest Range = .097" - .103" (2.46mm – 2.62mm)

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>