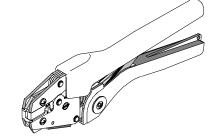


# **Hand Crimp Tool Operating Instruction Sheet And Specifications** Part No. 64001-2800 (Replaces 19803-1020)



#### **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
- Single color-coded crimp pocket eliminates the possibility of using the wrong pocket

#### **SCOPE**

<u>Products</u>: AviKrimp® Fully Insulated and-Insulated Quick Disconnect Flags 10-12 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 - 310
12	70
10	80

\*UL - 310 – Quick Disconnects, Flags and 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: $10 - 12$ AWG $5.00 - 3.00$ mm <sup>2</sup>					
Terminal No.	Terminal Eng No. (REF)	Wire Strip Length		Insulation Diameter Max.	
Terminar No.		In.	mm	In.	mm
19006-0019	C-5211	.344	8.73	.245	6.22
19007-0040	C-2211	.344	8.73	.260	6.60
19007-0082	C-2211V	.344	8.73	.260	6.60

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#### **OPERATION**

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

#### **Crimping Terminals**

- Insert the terminal with the barrel into the color-coded nest and the square edge of the flag facing out. Make sure the back of the flag terminal is against the locator. See Figure

   If terminal is not flush against the locator loosen the M4 wing nut and adjust the locator up or down so that the flat edge of the terminal is flush against the wall of the locator. Tighten the M4 wing nut. See Figure 3.
- JAWS OPEN

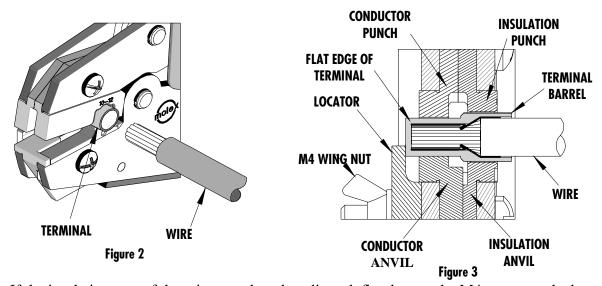
  LOCATOR

  Figure 1

  TERMINAL
- 2. Partially close the tool to hold the terminal in place shown in Figure 2.
- 3. Insert the properly stripped wire into the terminal barrel. See Figure 2 and 3. The wire ends should butt against the inside of the connector. Cycle the tool.

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

4. Remove the crimped terminal. Inspect for proper crimp location, and check for insulation closure.



5. 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 (CW) rotation decreases insulation crimp while a counter-clockwise (CCW) rotation increases insulation crimp. After adjusting, retighten the M4 screw.

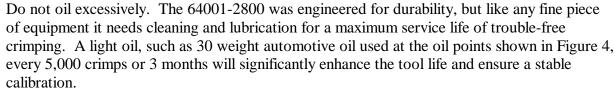
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#### Maintenance

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.



**LOOSEN M4** 

**SCREW** 

3/32" HEX

WRENCH

Figure 4

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.



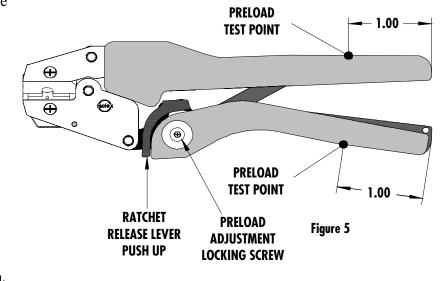
1. Should this tool ever become stuck or jammed in a partially closed position, **Do Not** force the handles open or closed. The tool will open easily by lifting the ratchet release lever. See Figure 5.

## **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:

- 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 (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.

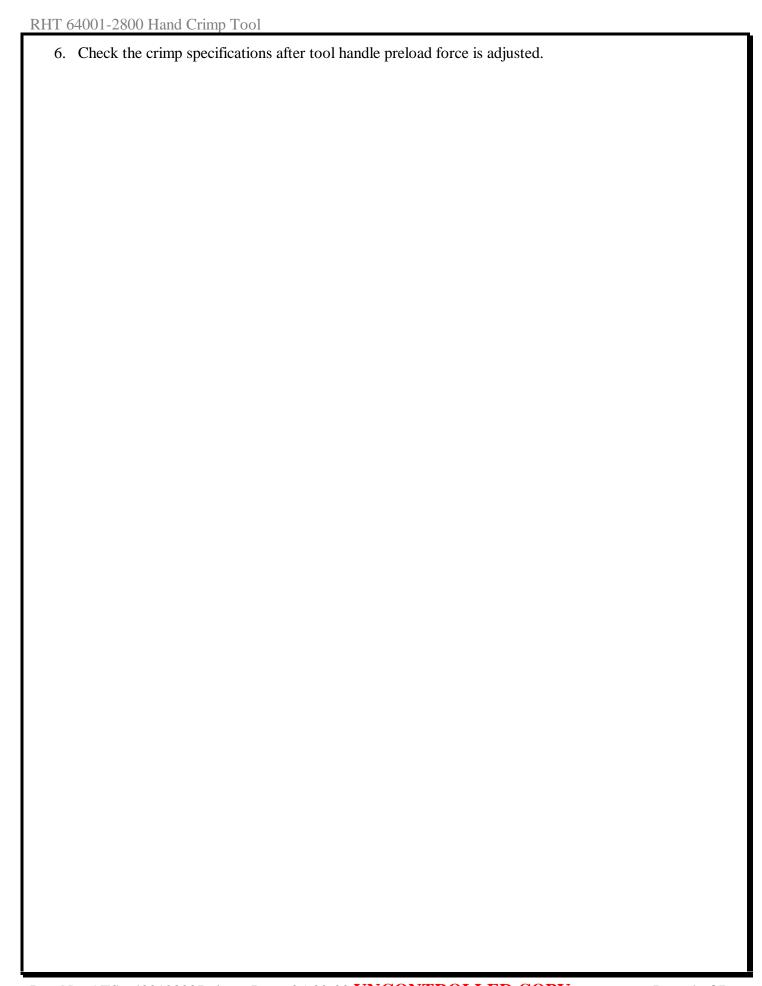


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LUBRICATION POINTS (BOTH SIDES)

**LIGHT OIL (EVERY 3 MONTHS** 

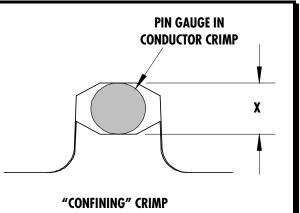
OR 5,000 CRIMPS)



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#### **Tool Calibration**

A Certificate of Calibration (see last page) was supplied with the tool. To recalibrate this tool, 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 Tool Preload (See Figure 6) to recalibrate.



Nest Color Code	Wire Range		"X" Dimension Conductor Crimp			Crimp Inspection Marking	
	AWG	mm²	Mean	Go	No Go		
Yellow	10-12	5.00-3.00	.115	.112	.118	O	

## 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.

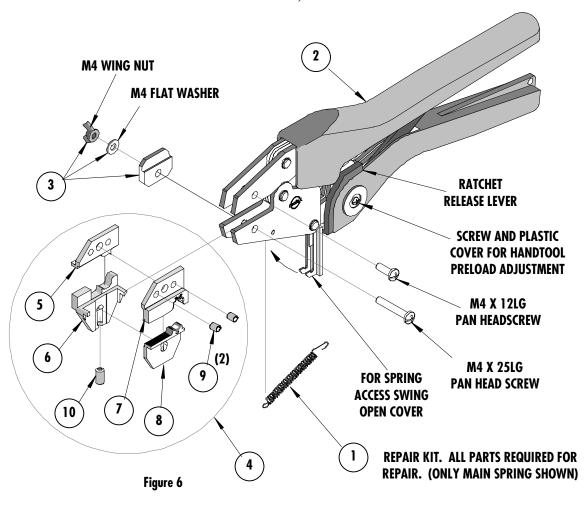
**CAUTION**: Molex crimp specifications are valid only when used with Molex terminals, applicators and tooling.

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### **PARTS LIST**

Item	Order No.	Description	Quantity				
	64001-2800 Hand Crimp Tool		Figure 6				
1	64000-0076	4000-0076 Repair Kit (Springs, Pins and E-Rings)					
2	63810-0000	Handle	1				
3	64001-2875	Locator Assembly	1				
4	64001-2870	Tooling Kit	1				
	Tooling Kit Only						
5	64001-2801	Conductor Punch	1				
6	64001-2802	Conductor Anvil	1				
7	64001-2804	Insulation Punch	1				
8	64001-2803	Insulation Anvil	1				
9	N/A	4 mm Diameter by 5.0mm Long Roll Pins	2**				
10	N/A	#10-32 by 5/16" Long Cup Pt. Set Screw	1**				

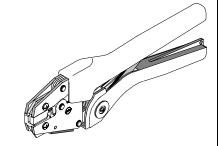
<sup>\*\*</sup> The following purchased parts are available from an Industrial supply company such as MSC (1-800-645-7270).



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## **Certificate of Calibration**

Tool Order N	Jumber	<u></u>					
Tool Eng. Nu	ımber						
Tool Revision	n						
Serial Numbe	er						
Date of Manu	ıfacture						
	Handle	Load Range at 1 inch from t	the Tips =				
			Actual =				
Pin Gauge of Conductor Nest/Nests or Slug height if the nest is the "F" Crimp style.							
Range Condu	actor Nest # 1 =	Actual =					
Technician							
Date of Calib	ration						
Calibration should be done every 5,000 cycles or 3 months.							
Tools should	be lubricated during this ope	eration.					
<b>Headquarters</b> 60532 U.S.A.	Far East North Headquarters Yamato, Kanagawa, Japan	Far East South Headquarters Jurong, Singapore	European Headquarters Munich, Germany	Corporate Headquar			

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