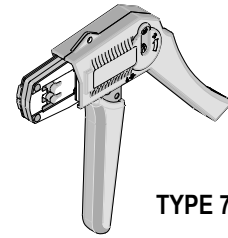


**HAND CRIMP  
TOOL**



**Application Tooling  
Specification Sheet**



**TYPE 7**

**Order No. 63811-9200**

**FEATURES**

- A full cycle ratcheting hand tool ensures complete crimps
- A precision user-friendly terminal locator wire stop holds terminals in the proper crimping position
- This tool is WHMA-IPCA620 Class 3 only with specified wire types and RoHS compliant

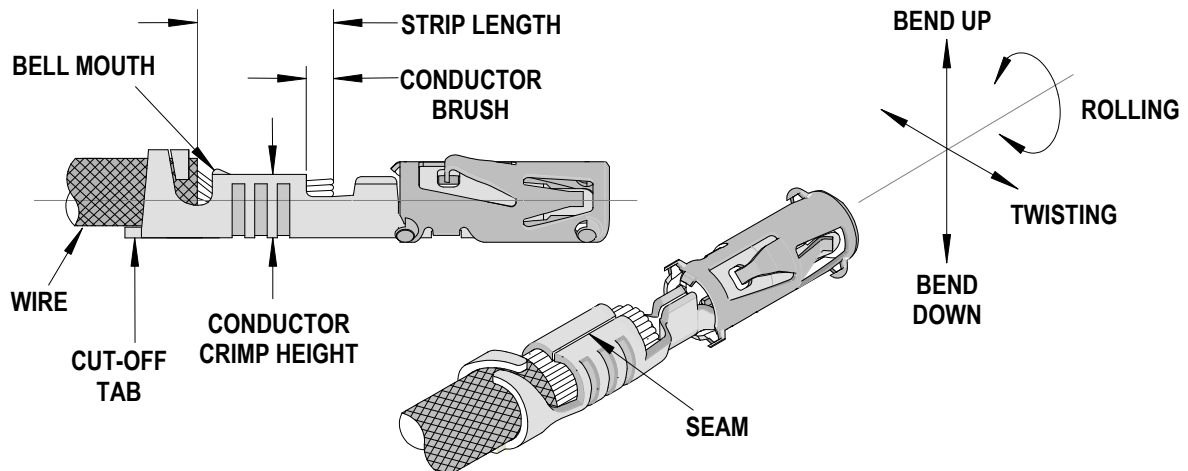
**SCOPE**

Products: 0.60mm (.027") CP0.6 Female Crimp Terminals for CMC connector 0.50-0.75mm<sup>2</sup>.

Terminal Series No.		Terminal Order No.		Wire Size		Insulation Diameter		Strip Length	
		* Available in Reel form only		AWG	mm <sup>2</sup>	mm	In.	mm	In.
98913	64322	98913-1029	64322-1029		0.75	1.60-1.80	.063-.071	3.50	.138
		98913-1219	64322-1219						
		98913-1319	64322-1319	0.60	1.75-1.90	.069-.075	3.50	.138	
		98913-1339	64322-1339						
98913-3029		0.50	1.40-1.50	.055-.059	3.50	.138			
98913	64322	98913-1039	64322-1039	0.50	1.40-1.50	.055-.059	3.50	.138	
		98913-1239	64322-1239						
		98913-1359	64322-1359						
		98913-1419							
		98913-3039							

\* Customer to cut off terminal from reel: 0.30mm (.012") maximum Cut-off Tab.  
Note: Terminal will accommodate the thin wall small insulation with the IR or ID type Metric wires.

**DEFINITION OF TERMS**



## CRIMP SPECIFICATION

After crimping, the conductor profiles should measure the following, see note.

Terminal Series No.	Wire Size		Conductor Crimp Height (Ref.)		Insulation Crimp Height (Ref.)		Pull Force Minimum		Profile	
	AWG	mm <sup>2</sup>	mm	In.	mm	In.	N	Lb.	0.6-0.75	0.50
98913		0.75	1.02-1.08	.040-.043	1.80-1.95	.071-.077	90.0	20.25	X	
		0.60	1.00-1.06	.039-.042	1.80-1.95	.071-.077	80.0	18.00	X	
		0.50	0.97-1.03	.038-.040	1.70-1.85	.067-.073	70.0	15.75		X
64322		0.75	1.02-1.08	.040-.043	1.80-1.95	.071-.077	90.0	20.25	X	
		0.60	1.00-1.06	.039-.042	1.80-1.95	.071-.077	80.0	18.00	X	
		0.50	0.97-1.03	.038-.040	1.70-1.85	.067-.073	70.0	15.75		X

### Note:

A crimp height chart is provided with this manual as Reference Only. Due to the wide range of wires, strands, insulation diameters, and durometers, actual crimp height measurements may vary slightly. An occasional, destructive, pull force test should be performed to check hand tool crimp. Pull Force value Must exceed the Minimum pull force specifications listed.

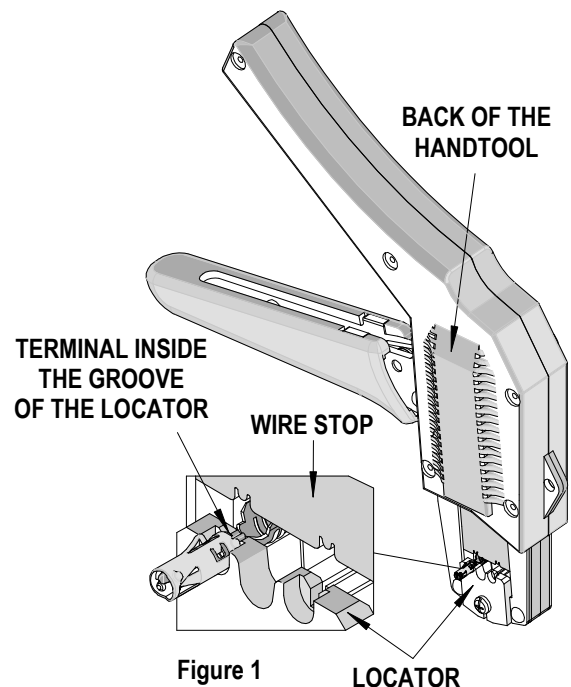
## OPERATION

**CAUTION:** Install only Molex terminals listed above with this tool. Do not crimp hardened objects as damage can occur to the tool or die.

Open the tool by squeezing the handles together, at the end of the closing stroke, the ratchet mechanism will release the handles, and the hand tool will spring open.

### Crimping Terminals

1. Select the desired terminal listed in the preceding charts.
2. Position the terminal from the back of the hand tool up and into the proper locator opening with the crimp barrels centered over the anvils. See Figure 1. Make sure when choosing the correct nest and locator opening, it will correspond with the pocket marked with the wire size profile on the hand tool.
3. Partially close the jaws of the hand tool by squeezing the handles until you hear the first click of the ratchet. This will move the wire stop into position.
4. From the front of the hand tool insert the pre-stripped wire over the terminal and against the wire stop. See Figure 2.
5. Compress the terminal by squeezing the tool handles until the ratchet mechanism cycle has been completed. Release handles to open the jaws.



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

6. Remove the crimped terminal from the terminal locator.
7. Visually inspect the crimped terminal for proper crimp location.

## Maintenance

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

1. Remove the plastic handles from the metal tool frame by removing the screws and 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. The 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. Light oil used at the pivot points every 5,000 crimps or 3 months, will significantly enhance the tool life.
4. Wipe excess oil from hand tool, particularly from crimping area.
5. 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.

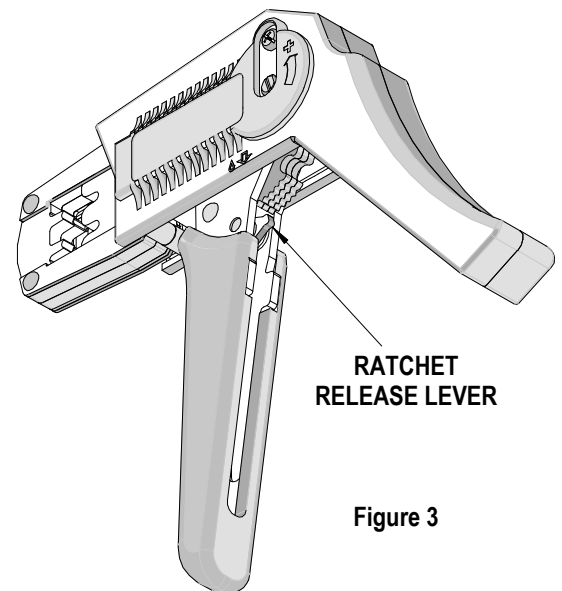
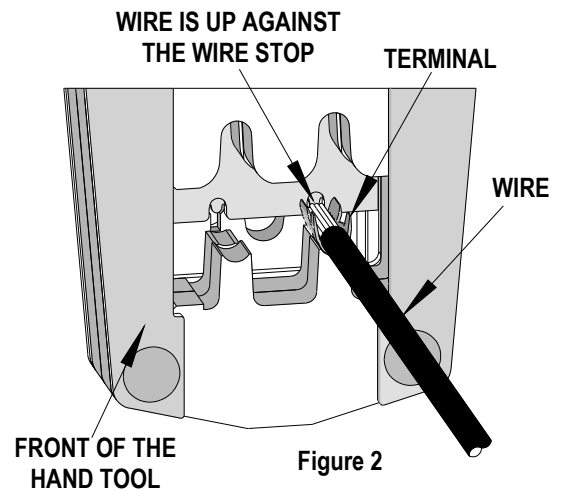
## Miscrimps or Jams

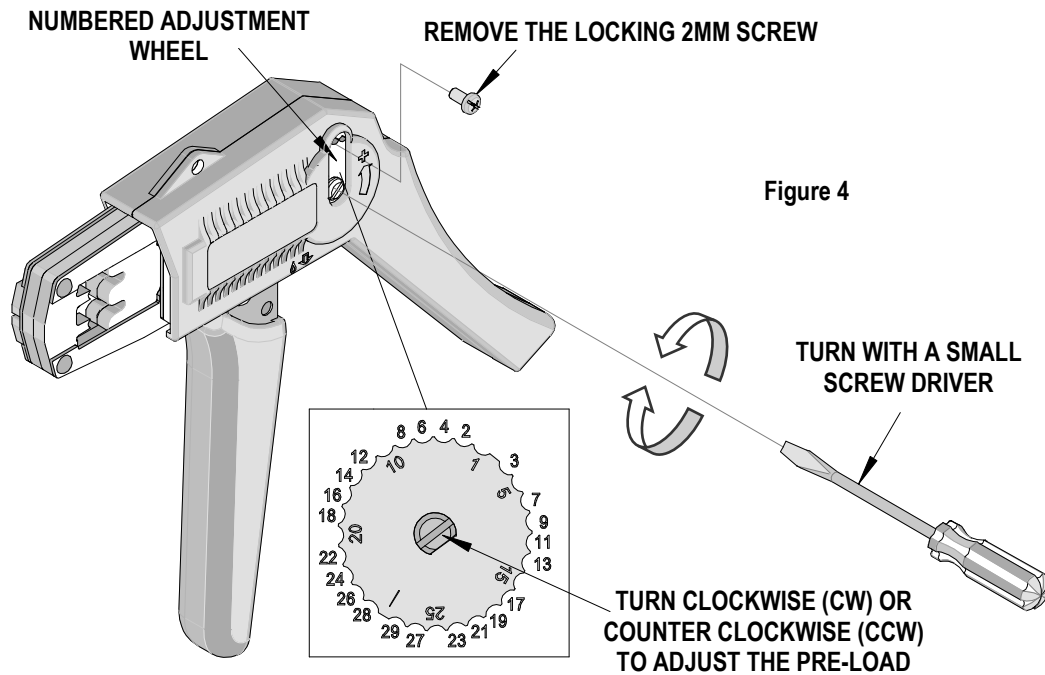
Should this tool ever become stuck or jammed in a partially closed position, **Do Not force the handles open or closed.** The tool will open easily by pressing the ratchet release lever up. See Figure 3.

## How to Adjust Tool Preload

It may be necessary over the life of the tool 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 2mm locking screw from the numbered adjusting wheel using a screw driver. See Figure 4.
2. Using the same screw driver turn the adjustment wheel to the next highest number.  
Note: The uneven numbers are in clockwise (CW) direction and the even numbers are counter clockwise (CCW).
3. Example: If the preload is set at number 5, then to increase the preload, turn the adjustment wheel until the 6<sup>th</sup> position is located over the 2mm locking screw tapped hole. If it is necessary to move to the 7<sup>th</sup> position, then the adjustment wheel should be turned counter clockwise (CCW) until the 7<sup>th</sup> position is over the 2mm locking screw tapped hole.
4. Replace the 2mm locking screw, aligning the nearest notch in the setting wheel to locking screw.
5. Check the crimp specifications and conduct a pull test after tool handle preload force is adjusted. Repeat these steps until the desired result is obtained.





## 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:** Molex crimp specifications are valid only when used with Molex terminals and tooling.

## CAUTIONS:

1. Manually powered hand tools are intended for low volume, prototyping, or field repair. This tool is **NOT** intended for production use. Repetitive use of this tool should be avoided.
2. Insulated rubber handles are not protection against electrical shock.
3. Wear eye protection at all times.
4. Use only the Molex terminals specified for crimping with this tool.

## Certification

Molex does not certify or re-certify hand tools but rather supplies the following guidelines for customers to re-certify hand tools.

- % This tool is qualified to pull force only. To re-certify, crimp a terminal to a wire, which has been stripped 12.7mm (1/2") long, so there is no crimping of the insulation. Pull the terminal and wire at a rate no faster than 25mm (1.00") per minute. See the Molex web site for the Quality Crimp Handbook for more information on pull testing.
- % If the tool does not meet minimum pull force values, handle preload should be increased and the pull test rerun, (See How to Adjust Preload).
- % When the hand tool is no longer capable of achieving minimum pull force, it should be taken out of service and replaced.

**PARTS LIST**

Item Number	Order Number	Description	Quantity
REF	63811-9200	Hand Crimp Tool	Figure 5
1	63811-9275	Locator	1
2	11-11-0320	Spring (Ratchet)	1
3	63600-0479	Spring (Main)	1
4	69008-0972	Adjuster Wheel	1

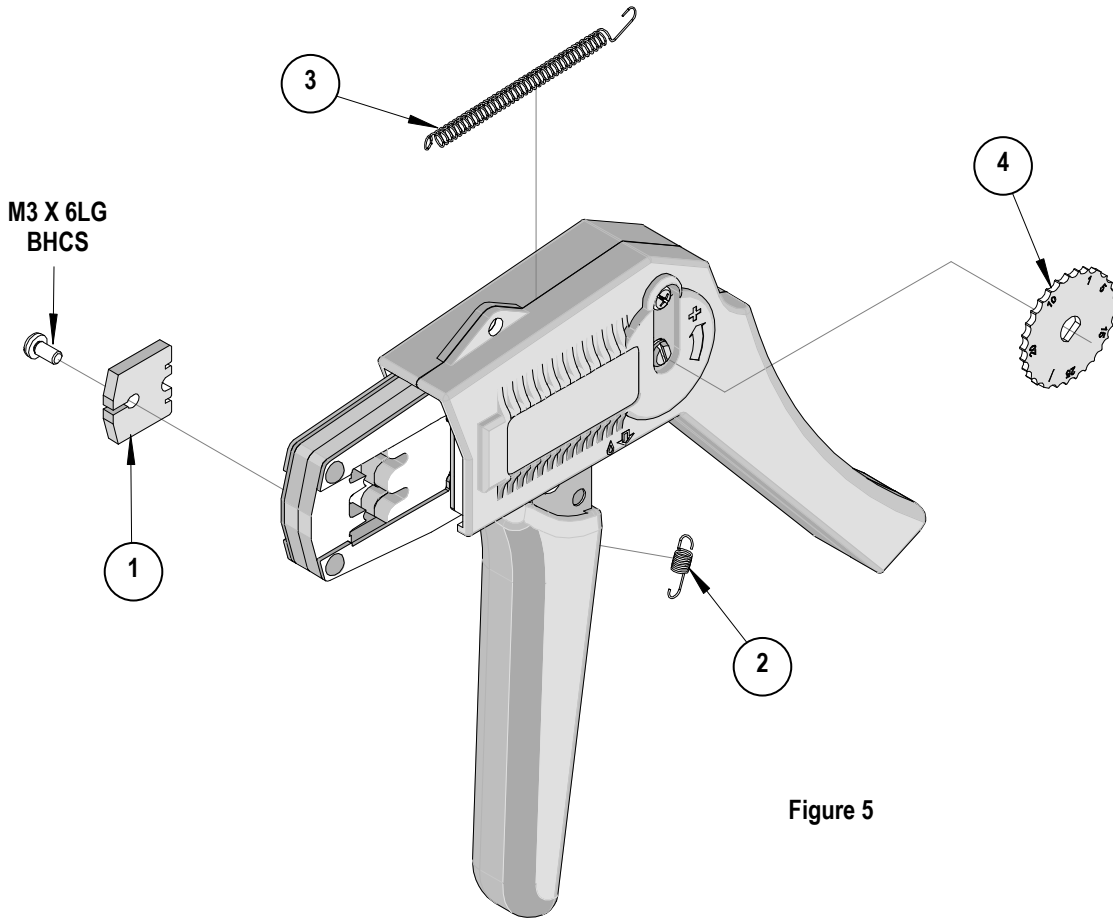


Figure 5

<http://www.molex.com>