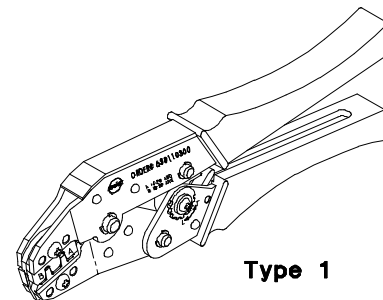




# HAND CRIMP TOOL

## Operating Instruction and Specification Sheet

### Order No. 63811-0200



Type 1

### FEATURES

- Small handle spread which make this style tool ideally suited for end users
- Ratchet with safety release that ensures consistent performance
- A precision user-friendly terminal locator wire stop holds terminals in the proper crimping position

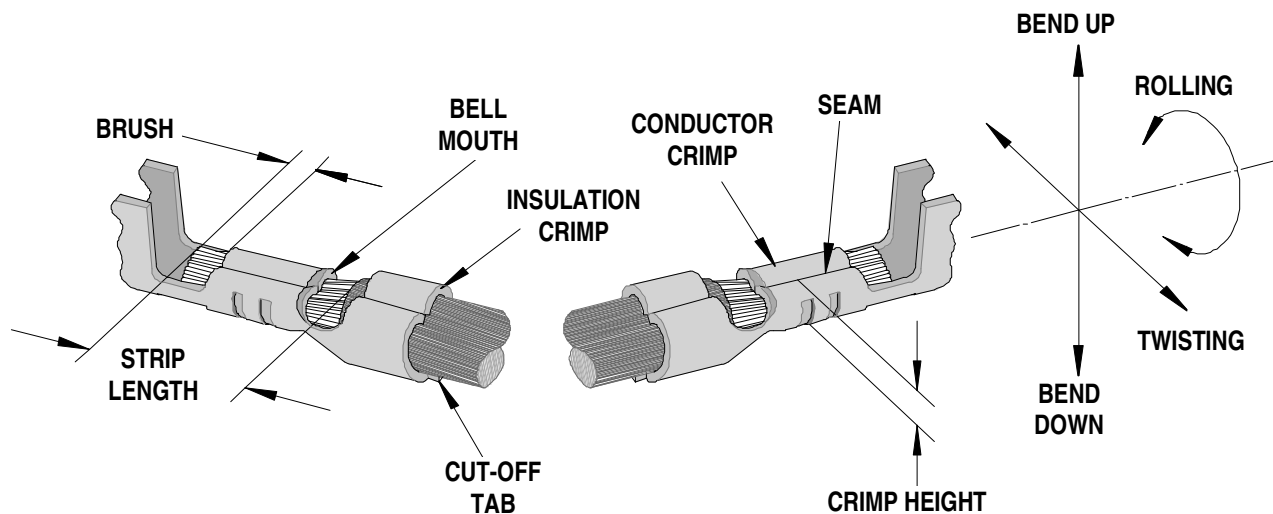
### SCOPE

Products: 1.25mm (.049") Pitch PicoBlade™ Crimp Terminal, 28-32 AWG and 1.25mm (.049") Pitch Board-In Crimp Terminal, 28-32 AWG.

Terminal Series No.	Terminal Order No.				Wire Size		Insulation Diameter		Strip Length	
	Loose Piece		*Reel		AWG	mm <sup>2</sup>	mm	In.	mm	In.
50058	50058-8100		50058-8000	50058-8200	28-32	0.08-0.03	0.67-1.00	.027-.039	1.40-1.91	.055-.075
	50058-8400		50058-8200							
50061	50061-8100	50061-8128	50061-8000	50061-8028	28-32	0.08-0.03	0.67-1.00	.027-.039	1.40-1.91	.055-.075
50133	50133-8100		50133-8000		28-32	0.08-0.03	0.67-1.00	.027-.039	1.40-1.91	.055-.075

\* Customer to cut off terminal from reel: 0.15mm (.006") maximum Cut-off Tab.

### DEFINITION OF TERMS



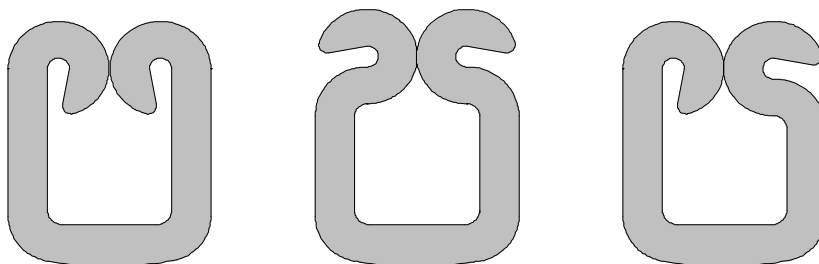
The above terminal drawing is a generic terminal representation. It is not an image of a terminal listed in the scope.

### INSULATION CRIMP FORM

This crimp terminal is designed for miniaturization; therefore each dimension of insulation crimp portion appears small as compared to the terminal material thickness. In order to avoid insulation piercing the crimp forms by the insulation barrel, coining is provided inside of the insulation barrel. For this reason, various crimp forms will occur at the tip of the insulation crimp barrel shown in the figure below.

These crimp forms maybe changed completely by a small change in the wire, insulation punch, or terminal.

These crimp forms are satisfactory for original function of the insulation crimp portion and it is confirmed that all of these forms below are acceptable insulation crimps.



### CONDITIONS

After crimping, the conductor profiles should measure the following (see notes on page 5).

Terminal Series No.	Wire Size		Conductor Crimp				Pull Force Minimum		Profile	
			Height (Ref)		Punch Width (Ref)					
	AWG	mm <sub>2</sub>	mm	In.	mm	In.	N	Lb.	A	B
50058	28	0.08	0.51-0.56	.020-.022	0.79	.031	9.8	2.20		X
	30	0.05	0.48-0.53	.019-.021	0.79	.031	4.9	1.10		X
	32	0.03	0.46-0.51	.018-.020	0.79	.031	2.9	0.66		X
50061	28	0.08	0.48-0.53	.019-.021	0.79	.031	9.8	2.20	X	
	30	0.05	0.46-0.51	.018-.020	0.79	.031	4.9	1.10	X	
	32	0.03	0.43-0.48	.017-.019	0.79	.031	2.9	0.66	X	
50133	28	0.08	0.48-0.53	.019-.021	0.79	.031	9.8	2.20	X	
	30	0.05	0.46-0.51	.018-.020	0.79	.031	4.9	1.10	X	
	32	0.03	0.43-0.48	.017-.019	0.79	.031	2.9	0.66	X	

## OPERATION

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

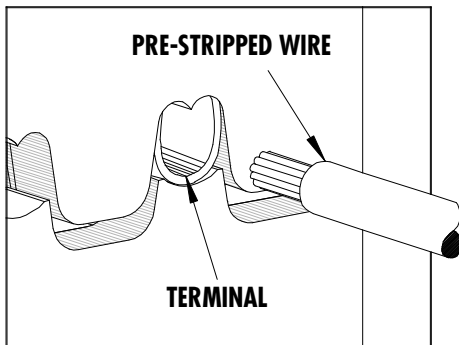


Figure 1

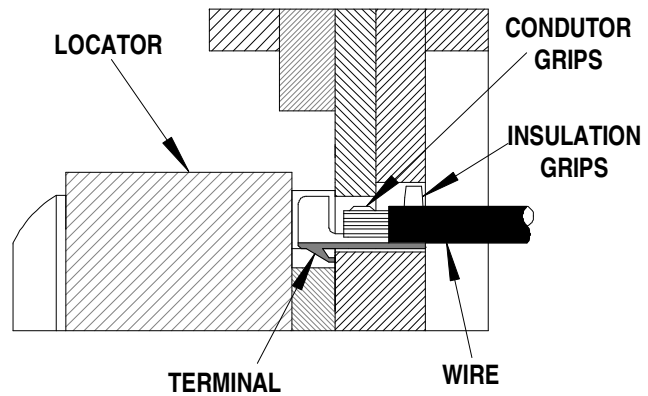


Figure 2

1. Place the terminal into the correct die profile (A or B) in the jaws of the hand tool.
2. Partially close the tool until the terminal is held in place. See Figure 1. If the insulation diameter is too large to do this, then place the insulation down into the terminal before closing the tool.
3. Position a wire into the terminal so the wire lines up with the conductor and insulation grips visually.
4. Finish closing the hand tool until the ratchet releases. See Figure 4.
5. Then open the tool and carefully remove the crimped terminal.

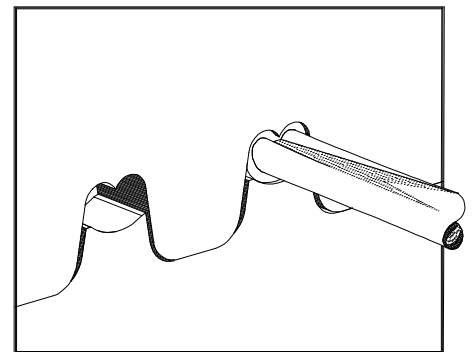


Figure 3

### 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.
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.

### 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 lifting the ratchet release lever. See Figure 4.

## How to Adjust Tool Crimp Force (See Figure 4)

It may be necessary over the life of the tool to adjust tool-crimping 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 washer. Located over the adjustment ring.
2. Lift the adjusting ring slightly, off of the locating pin.
3. Turn the adjusting ring in the desired direction (L= less force, T= more force) to increase or decrease crimp pressure.
4. Press the adjusting wheel flat against the tool and engage the locking pin.
5. Replace the washer and screw.
6. Check the crimp specifications after tool crimp force is adjusted.

## 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 would exchange the tool free of charge. This 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.**

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

## Notes:

1. This tool should only be used for the terminals and wire gauges specified on this sheet.
2. This tool is not adjustable for crimp height; however crimp force is adjustable (See instructions above). Variations in tools, terminals, wire stranding and insulation types may affect crimp height.
3. This tool is intended for standard conductor sizes. It may not give a good insulation crimp support for all insulation sizes.
4. Molex does not repair hand tools (see warranty above). The replacement parts listed are the only parts available for repair. If the handles or crimp tooling is damaged or worn, a new tool must be purchased.
5. Pull force should be used as the final criteria for an acceptable crimp. Pull force is measured with no influence from the insulation crimp. The insulation should be stripped long (1/2 in.) so the insulation grips on the terminal do not grip the wire insulation or the conductor. Refer to Molex Quality Crimping Handbook 63800-0029 for additional information on crimping and crimp testing.
6. Molex does not certify crimp hand tools.
7. Hand held crimping tools are intended for low volume, prototyping, or repair requirements only.

## PARTS LIST

Item Number	Order Number	Description	Quantity
1	63811-0201	✗ Locator Assembly	1
2	11-11-0324	Spring (Main)	1
3	11-11-0320	Spring (Ratchet)	1

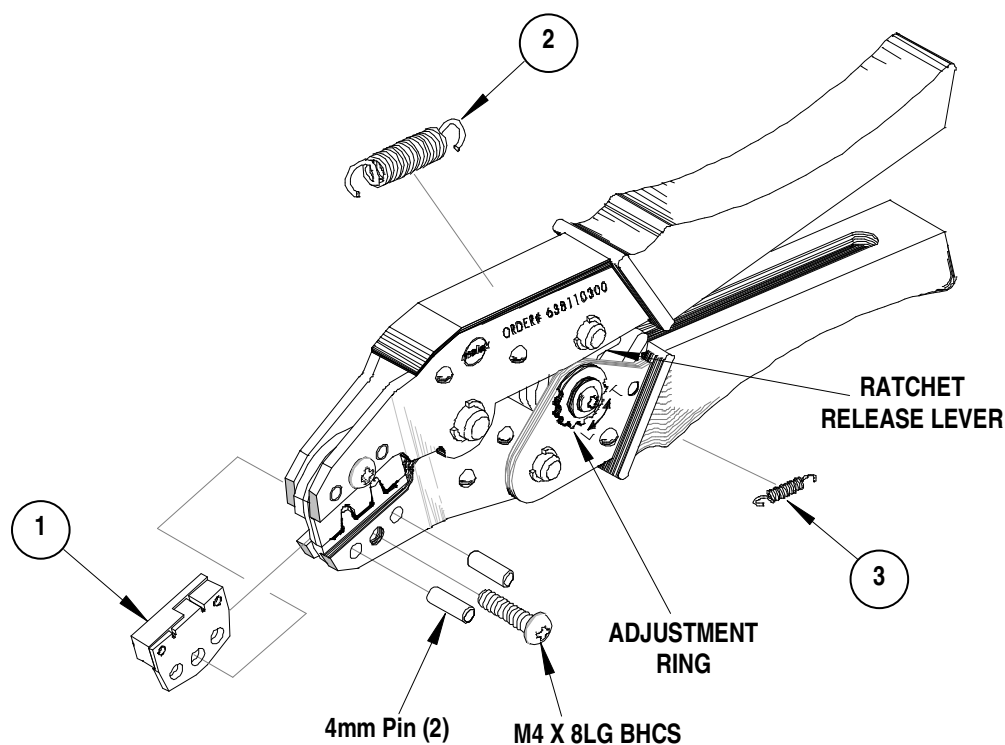


Figure 4

✗ To replace the locator assembly, the M4 x 8 long screw and the (2) 4mm pins must be removed from the tool.

**Americas Headquarters**  
 Lisle, Illinois 60532 U.S.A.  
 1-800-78MOLEX  
 amerinfo@molex.com

**Far East North Headquarters**  
 Yamato, Kanagawa, Japan  
 81-462-65-2324  
 feninfo@molex.com

**Far East South Headquarters**  
 Jurong, Singapore  
 65-6-268-6868  
 fesinfo@molex.com

**European Headquarters**  
 Munich, Germany  
 49-89-413092-0  
 eurinfo@molex.com

**Corporate Headquarters**  
 2222 Wellington Ct.  
 Lisle, IL 60532 U.S.A.  
 630-969-4550  
 Fax: 630-969-1352

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