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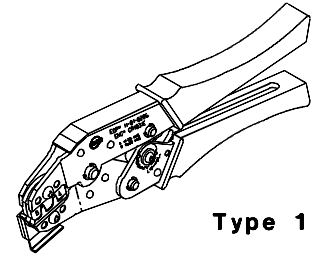




# HAND CRIMP TOOL

## Operating Instruction and Specification Sheet

### Order No. 63811-2200



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

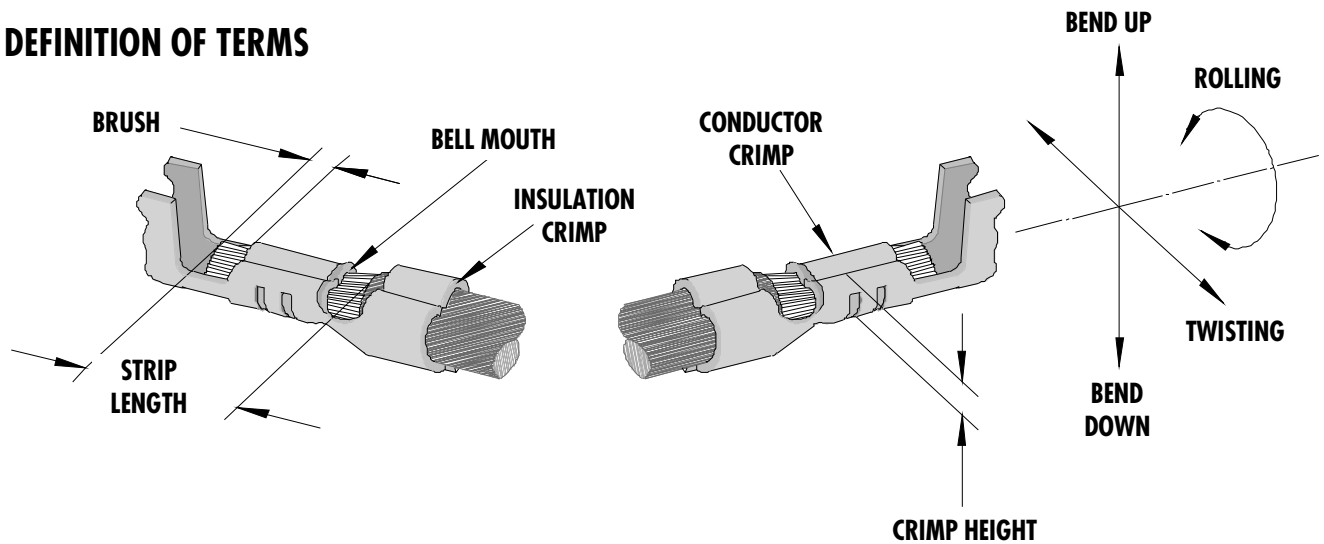
## SCOPE

Products: 3.96mm (.156") Pitch KK® Crimp Terminal for 18-24 AWG

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](http://www.molex.com)

Terminal Series No.	Terminal Order No.			Wire Size		Insulation Diameter		Strip Length	
				AWG	mm <sup>2</sup>	mm	In.	mm	In.
2477	08-50-0110	08-56-0114		18-24	0.80-0.20	1.39-2.79	.055-.110	2.54-3.17	.100-.125
2478	08-50-0006	08-52-0024	08-56-0106	18-24	0.80-0.20	1.39-2.79	.055-.110	2.54-3.17	.100-.125
	08-50-0014	08-52-0045	08-56-0154						
	08-50-0016	08-52-0047	08-58-0104						
	08-50-0046	08-52-0072	08-58-0115						
	08-50-0064	08-52-0074	08-58-0122						
	08-50-0074	08-52-0115	08-65-0115						
	08-50-0093	08-52-0812	40-01-1120						
	08-50-0106	08-53-0812	50-29-1762						
	08-50-0120	08-55-0104	50-30-4428						
	08-50-0147	08-55-0134	50-30-4429						
2878	08-50-0116	08-58-0128		18-20	0.80-0.50	1.52-2.79	.060-.110	2.54-3.17	.100-.125
	08-52-0127	08-65-0119							
4838	08-50-0132	08-55-0141	08-55-0146	18-22	0.80-0.35	1.52-2.41	.060-.095	2.54-3.17	.100-.125
	08-55-0140	08-55-0143	08-55-0148						
5167	08-70-0013	08-70-1034		18-24	0.80-0.20	1.39-2.48	.055-.098	2.54-3.17	.100-.125
6438	08-50-0165	08-56-0133		18-20	0.80-0.50	1.52-2.41	.060-.095	2.54-3.17	.100-.125
	08-51-0802	08-56-0139							
6838	08-50-0029	08-53-1102	08-58-0132	18-20	0.80-0.50	1.52-2.79	.060-.110	2.54-3.17	.100-.125
	08-50-0189	08-58-0106	08-58-0189						
	08-50-0251	08-58-0109	08-60-0002						
	08-51-0107	08-58-0111							
	08-52-0113	08-58-0119							
8993	08-50-0276			18-24	0.80-0.20	1.39-2.79	.055-.110	2.54-3.17	.100-.125

**DEFINITION OF TERMS**



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

**CONDITIONS:**

After crimping, the conductor profiles should measure the following (see notes on page 4).

Terminal Series No.	Wire Size		Cond. Crimp Height (REF)		Punch Width (Ref)				Pull Force Min.		Profile	
	AWG	mm <sup>2</sup>	mm	In.	Cond.		Ins.		N	Lb.	A	B
					mm	In.	mm	In.				
2477	18	0.80	1.01-1.11	.040-.044	2.00	.079	2.50	.098	89.0	20.00	X	
2477	20	0.50	1.01-1.11	.040-.044	2.00	.079	2.50	.098	57.8	13.00	X	
2477	22	0.35	0.86-0.96	.034-.038	2.00	.079	2.50	.098	35.6	8.00		X
2477	24	0.20	0.86-0.96	.034-.038	2.00	.079	2.50	.098	22.2	5.00		X
2478	18	0.80	1.01-1.11	.040-.044	2.00	.079	2.50	.098	89.0	20.00	X	
2478	20	0.50	1.01-1.11	.040-.044	2.00	.079	2.50	.098	57.8	13.00	X	
2478	22	0.35	0.86-0.96	.034-.038	2.00	.079	2.50	.098	35.6	8.00		X
2478	24	0.20	0.86-0.96	.034-.038	2.00	.079	2.50	.098	22.2	5.00		X
2878	18	0.80	1.01-1.11	.040-.044	2.00	.079	2.50	.098	89.0	20.00	X	
2878	20	0.50	1.01-1.11	.040-.044	2.00	.079	2.50	.098	57.8	13.00	X	
4838	18	0.80	1.01-1.11	.040-.044	2.00	.079	2.50	.098	89.0	20.00	X	
4838	20	0.50	1.01-1.11	.040-.044	2.00	.079	2.50	.098	57.8	13.00	X	
4838	22	0.35	0.86-0.96	.034-.038	2.00	.079	2.50	.098	35.6	8.00		X
5167	18	0.80	1.01-1.11	.040-.044	2.00	.079	2.50	.098	89.0	20.00	X	
5167	20	0.50	1.01-1.11	.040-.044	2.00	.079	2.50	.098	57.8	13.00	X	
5167	22	0.35	0.86-0.96	.034-.038	2.00	.079	2.50	.098	35.6	8.00		X
5167	24	0.20	0.86-0.96	.034-.038	2.00	.079	2.50	.098	22.2	5.00		X
6438	18	0.80	1.01-1.11	.040-.044	2.00	.079	2.50	.098	89.0	20.00	X	
6438	20	0.50	1.01-1.11	.040-.044	2.00	.079	2.50	.098	57.8	13.00	X	

Terminal Series No.	Wire Size		Cond. Crimp Height (REF)		Punch Width (Ref)				Pull Force Min.		Profile	
					Cond.		Ins.					
	AWG	mm <sup>2</sup>	mm	In.	mm	In.	mm	In.	N	Lb.	A	B
6838	18	0.80	1.01-1.11	.040-.044	2.00	.079	2.50	.098	89.0	20.00	X	
6838	20	0.50	1.01-1.11	.040-.044	2.00	.079	2.50	.098	57.8	13.00	X	
8993	18	0.80	1.01-1.11	.040-.044	2.00	.079	2.50	.098	89.0	20.00	X	
8993	20	0.50	1.01-1.11	.040-.044	2.00	.079	2.50	.098	57.8	13.00	X	
8993	22	0.35	0.86-0.96	.034-.038	2.00	.079	2.50	.098	35.6	8.00		X
8993	24	0.20	0.86-0.96	.034-.038	2.00	.079	2.50	.098	22.2	5.00		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

1. Lift the locator blade and place the terminal into the correct die profile (A or B), release the locator blade. Not all tools are equipped with a locator or locator blade.
2. Partially close the tool until the terminal is held in place, (See Figure 2).
3. Place a wire into the terminal and up against the locator blade, (See Figure 3). On tools without locators line the wire up with the conductor and insulation grips visually.
4. Close the tool until the ratchet releases, (See Figure 4).
5. Lift the locator blade or wire stop up.
6. Carefully remove the crimped terminal.

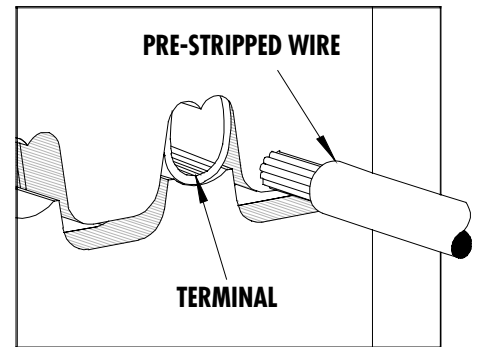


Figure 1

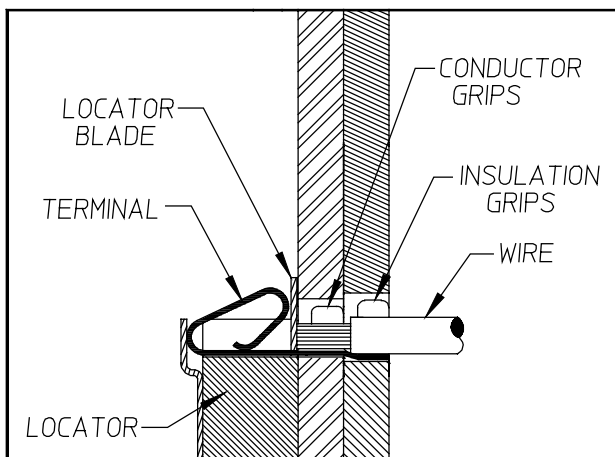


Figure 2

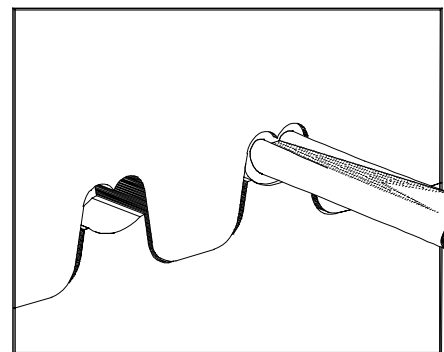


Figure 3

## 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.**

## 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.

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

**PARTS LIST**

Item Number	Order Number	Description	Quantity
1	63811-2275	Locator Assembly**	1
2	11-11-0324	Spring (Main)	1
3	11-11-0320	Spring (Ratchet)	1

\*\* Not all tools are equipped with a locator or locator blade.

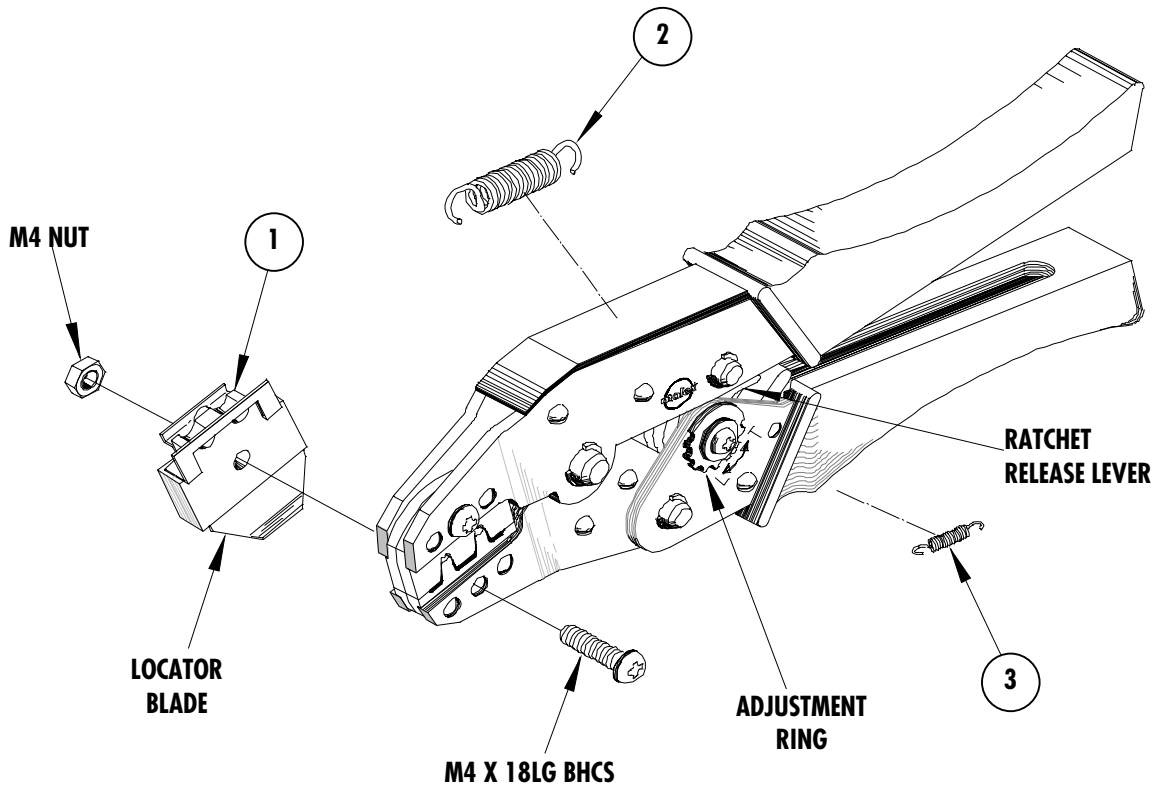


Figure 4

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