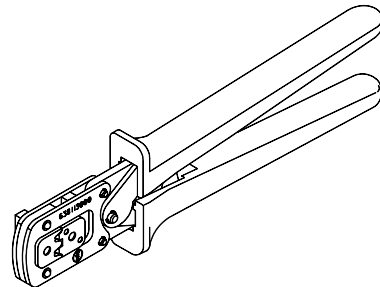




**TOOLING  
SPECIFICATION SHEET  
HAND CRIMP TOOL  
Part No. 63811-4000  
(MX150L-Female Receptacle)**

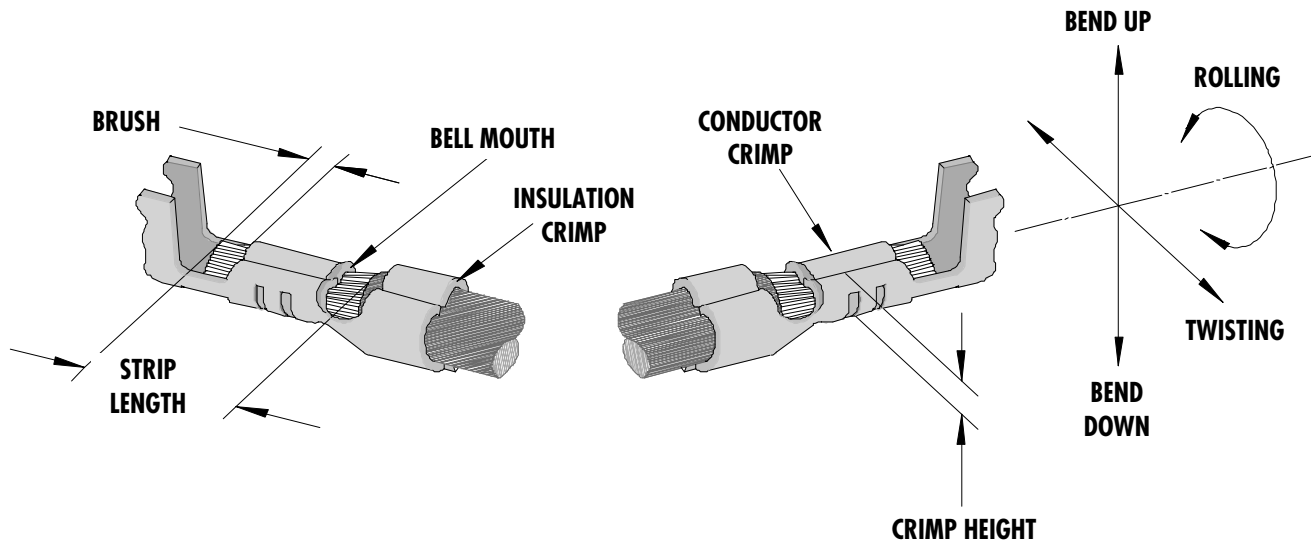


Type 4A

**SCOPE**

Terminal Series No.	Wire Size		Insulation Diameter		Strip Length	
	AWG	mm <sup>2</sup>	mm	In.	mm	In.
19420-0009	14-16	2.00-1.27	2.87-3.53	.113-.139	4.20-5.00	.165-.197
19420-0011	14-16	2.00-1.27	2.87-3.53	.113-.139	4.20-5.00	.165-.197
19420-0010	18-22	0.83-0.36	2.36-2.74	.093-.108	4.20-5.00	.165-.197
19420-0012	18-22	0.83-0.36	2.36-2.74	.093-.108	4.20-5.00	.165-.197

**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 crimp profiles should measure the following (see notes on page 5).

Terminal Series No.	Bell mouth		Conductor Brush		Bend up Bend Down		Twist Roll	
	mm	In.	mm	In.	Degree		Degree	
19420-0009	0.25-1.25	.010-.049	0.15-0.65	.006-.026	5	5	4	8
19420-0011	0.25-1.25	.010-.049	0.15-0.65	.006-.026	5	5	4	8
19420-0010	0.25-1.25	.010-.049	0.15-0.65	.006-.026	5	5	4	8
19420-0012	0.25-1.25	.010-.049	0.15-0.65	.006-.026	5	5	4	8

Terminal Series No.	Wire Size		Cond. Crimp Height		Cond. Crimp Width		Insul. Crimp Height REF		Insul. Crimp Width		Pull Force Min.		Profile AWG	
	AWG	mm <sup>2</sup>	mm	In.	mm	In.	mm	In.	mm	In.	N	Lb.	18-22	14-16
19420-0009	14	2.00	1.45 REF	.057 REF	2.50 REF	.098 REF	3.50 max.	.138 max.	4.30 REF	.169 REF	222.6	50.00		X
19420-0009	16	1.27	1.45 REF	.057 REF	2.50 REF	.098 REF	3.50 max.	.138 max.	4.30 REF	.169 REF	133.5	30.00		X
19420-0011	14	2.00	1.45 REF	.057 REF	2.50 REF	.098 REF	3.50 max.	.138 max.	4.30 REF	.169 REF	222.6	50.00		X
19420-0011	16	1.27	1.45 REF	.057 REF	2.50 REF	.098 REF	3.50 max.	.138 max.	4.30 REF	.169 REF	133.5	30.00		X
19420-0010	18	0.83	1.10 REF	.043 REF	2.00 REF	.079 REF	3.00 max.	.118 max.	3.40 REF	.134 REF	89.0	20.00	X	
19420-0010	20	0.58	1.10 REF	.043 REF	2.00 REF	.079 REF	3.00 max.	.118 max.	3.40 REF	.134 REF	57.9	13.00	X	
19420-0010	22	0.36	1.10 REF	.043 REF	2.00 REF	.079 REF	3.00 max.	.118 max.	3.40 REF	.134 REF	35.6	8.00	X	
19420-0012	18	0.83	1.10 REF	.043 REF	2.00 REF	.079 REF	3.00 max.	.118 max.	3.40 REF	.134 REF	89.0	20.00	X	
19420-0012	20	0.58	1.10 REF	.043 REF	2.00 REF	.079 REF	3.00 max.	.118 max.	3.40 REF	.134 REF	57.9	13.00	X	
19420-0012	22	0.36	1.10 REF	.043 REF	2.00 REF	.079 REF	3.00 max.	.118 max.	3.40 REF	.134 REF	35.6	8.00	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 wire stop blade up.
2. Insert the terminal fully into the correct die profile and the locator slot until the terminal is fully seated and stops.
3. Bring down the wire stop blade. Make sure the wire stop blade is fully seated on the terminal behind the conductor grip section.
4. Slide the pre-stripped wire into the terminal; make sure to aim the wire brush towards the tip point on the wire stop blade (See Figure 1). Align the wire so that it is parallel and sitting into the terminal. Maintain a light and constant pressure on the wire that is seated in the terminal at all times. (Do not let go of the wire.) Be sure to hold the wire and terminal in place until the terminal is fully crimped. (See Figure 2).
5. Close the tool until the ratchet releases.
6. Lift the wire stop blade up.
7. Carefully remove the crimped terminal.

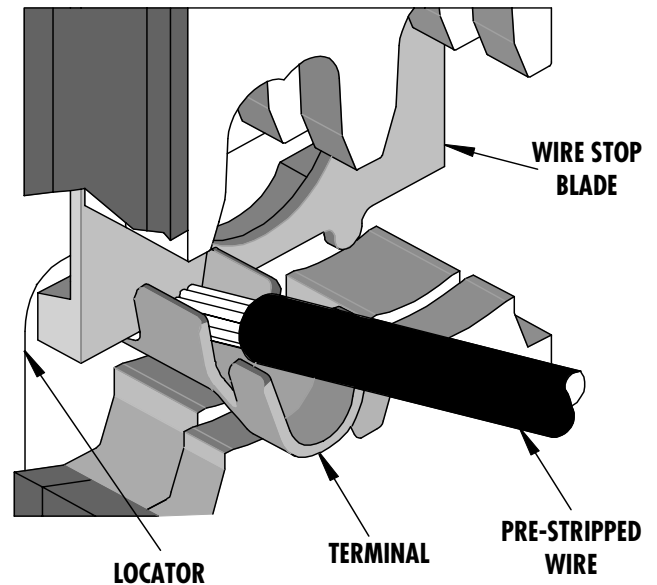


Figure 1

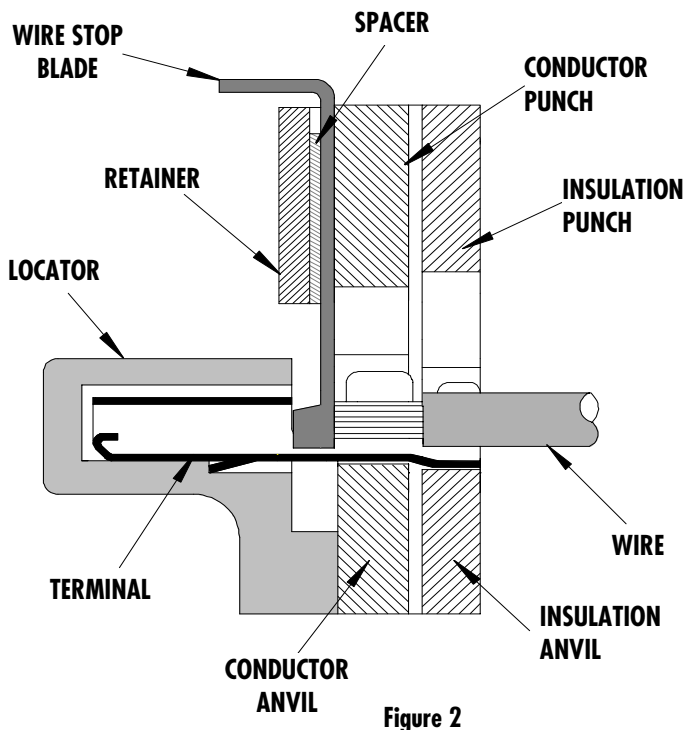


Figure 2

**Note:** To maintain a good brush control and a consistent bell mouth the crimping instructions must be followed.

## 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 (See Figure 3)

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 pushing the ratchet release lever.

## 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. Variations in tools, terminals, wire stranding and insulation types may effect 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.

**PARTS LIST**

Item Number	Order Number	Description	Quantity
1	63600-0520	Crimping Spring	2
2	63811-4075	Locator	1
3	63600-0525	Handle Spring	1

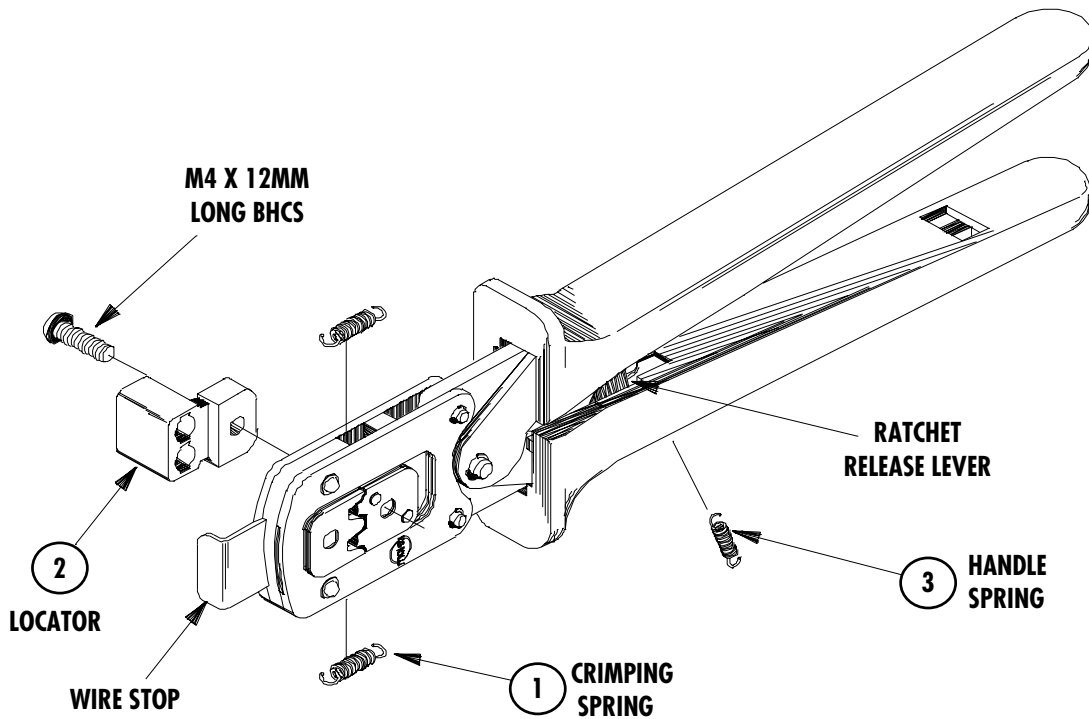


Figure 3

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