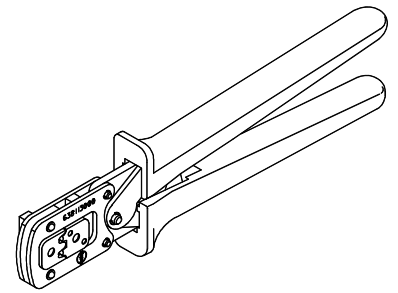




**HAND CRIMP TOOL  
SPECIFICATION SHEET  
Part No. 63811-4400  
(MX150L-Female Receptacle  
and Male Pin)**

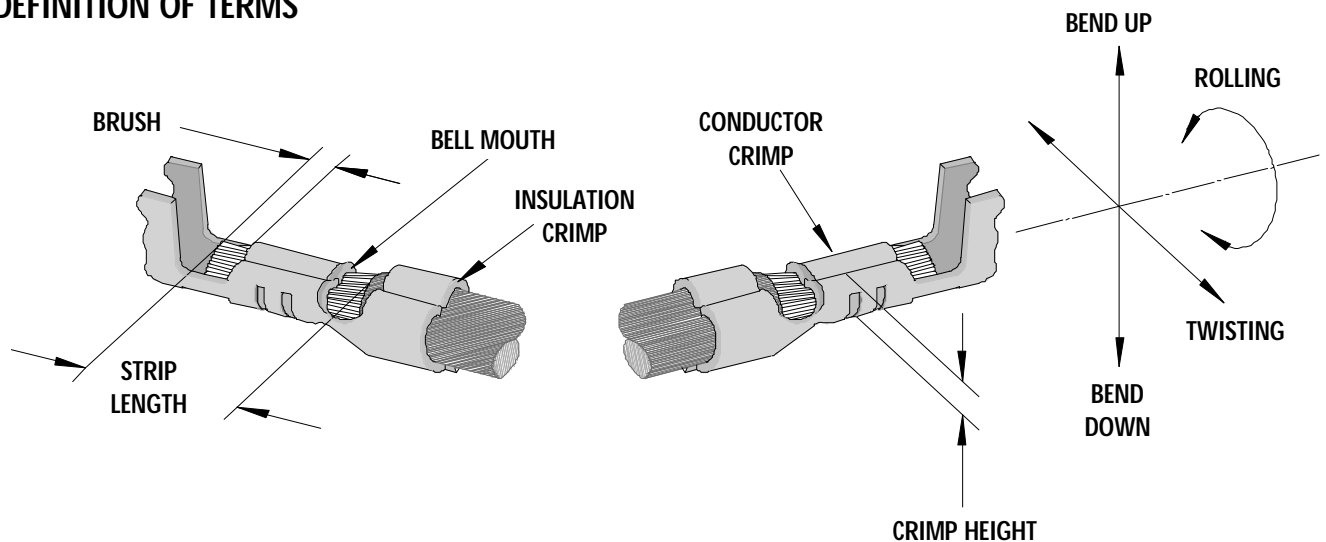


**Type 4A**

**SCOPE**

Terminal Series No.	Wire Size		Insulation Diameter		Strip Length	
	AWG	mm <sup>2</sup>	mm	In.	mm	In.
19417-0047	14-16	2.00-1.27	2.87-3.53	.113-.139	4.20-5.00	.165-.197
19417-0049	14-16	2.00-1.27	2.87-3.53	.113-.139	4.20-5.00	.165-.197
19417-0051	14-16	2.00-1.27	2.87-3.53	.113-.139	4.20-5.00	.165-.197
19417-0053	14-16	2.00-1.27	2.87-3.53	.113-.139	4.20-5.00	.165-.197
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
19417-0048	18-22	0.83-0.36	2.36-2.74	.093-.108	4.20-5.00	.165-.197
19417-0050	18-22	0.83-0.36	2.36-2.74	.093-.108	4.20-5.00	.165-.197
19417-0052	18-22	0.83-0.36	2.36-2.74	.093-.108	4.20-5.00	.165-.197
19417-0054	18-22	0.83-0.36	2.36-2.74	.093-.108	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	
19417-0047	0.25-1.25	.010-.049	0.15-0.65	.006-.026	5	5	4	8
19417-0048	0.25-1.25	.010-.049	0.15-0.65	.006-.026	5	5	4	8
19417-0049	0.25-1.25	.010-.049	0.15-0.65	.006-.026	5	5	4	8
19417-0050	0.25-1.25	.010-.049	0.15-0.65	.006-.026	5	5	4	8
19417-0051	0.25-1.25	.010-.049	0.15-0.65	.006-.026	5	5	4	8
19417-0052	0.25-1.25	.010-.049	0.15-0.65	.006-.026	5	5	4	8
19417-0053	0.25-1.25	.010-.049	0.15-0.65	.006-.026	5	5	4	8
19417-0054	0.25-1.25	.010-.049	0.15-0.65	.006-.026	5	5	4	8
19420-0009	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
19420-0011	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 REF		Cond. Crimp Width REF		Insul. Crimp Height REF		Insul. Crimp Width REF		Pull Force Min.		Profile AWG	
	AWG	mm <sup>2</sup>	mm	In.	mm	In.	mm	In.	mm	In.	N	Lb.	18-22	14-16
19417-0047	14	2.00	1.45-1.55	.057-.061	2.50	.098	3.50 max.	.138 max.	4.30	.169	222.6	50.00		X
19417-0047	16	1.27	1.45-1.55	.057-.061	2.50	.098	3.50 max.	.138 max.	4.30	.169	133.5	30.00		X
19417-0049	14	2.00	1.45-1.55	.057-.061	2.50	.098	3.50 max.	.138 max.	4.30	.169	222.6	50.00		X
19417-0049	16	1.27	1.45-1.55	.057-.061	2.50	.098	3.50 max.	.138 max.	4.30	.169	133.5	30.00		X
19417-0051	14	2.00	1.45-1.55	.057-.061	2.50	.098	3.50 max.	.138 max.	4.30	.169	222.6	50.00		X
19417-0051	16	1.27	1.45-1.55	.057-.061	2.50	.098	3.50 max.	.138 max.	4.30	.169	133.5	30.00		X
19417-0053	14	2.00	1.45-1.55	.057-.061	2.50	.098	3.50 max.	.138 max.	4.30	.169	222.6	50.00		X
19417-0053	16	1.27	1.45-1.55	.057-.061	2.50	.098	3.50 max.	.138 max.	4.30	.169	133.5	30.00		X
19420-0009	14	2.00	1.45-1.55	.057-.061	2.50	.098	3.50 max.	.138 max.	4.30	.169	222.6	50.00		X
19420-0009	16	1.27	1.45-1.55	.057-.061	2.50	.098	3.50 max.	.138 max.	4.30	.169	133.5	30.00		X
19420-0011	14	2.00	1.45-1.55	.057-.061	2.50	.098	3.50 max.	.138 max.	4.30	.169	222.6	50.00		X
19420-0011	16	1.27	1.45-1.55	.057-.061	2.50	.098	3.50 max.	.138 max.	4.30	.169	133.5	30.00		X
19417-0048	18	0.83	1.10-1.20	.043-.047	2.00	.079	3.00 max.	.118 max.	3.40	.134	89.0	20.00	X	
19417-0048	20	0.83	1.10-1.20	.043-.047	2.00	.079	3.00 max.	.118 max.	3.40	.134	57.9	13.00	X	
19417-0048	22	0.83	1.10-1.20	.043-.047	2.00	.079	3.00 max.	.118 max.	3.40	.134	35.6	8.00	X	
19417-0050	18	0.83	1.10-1.20	.043-.047	2.00	.079	3.00 max.	.118 max.	3.40	.134	89.0	20.00	X	
19417-0050	20	0.58	1.10-1.20	.043-.047	2.00	.079	3.00 max.	.118 max.	3.40	.134	57.9	13.00	X	
19417-0050	22	0.36	1.10-1.20	.043-.047	2.00	.079	3.00 max.	.118 max.	3.40	.134	35.6	8.00	X	
19417-0052	18	0.83	1.10-1.20	.043-.047	2.00	.079	3.00 max.	.118 max.	3.40	.134	89.0	20.00	X	
19417-0052	20	0.58	1.10-1.20	.043-.047	2.00	.079	3.00 max.	.118 max.	3.40	.134	57.9	13.00	X	
19417-0052	22	0.36	1.10-1.20	.043-.047	2.00	.079	3.00 max.	.118 max.	3.40	.134	35.6	8.00	X	
19417-0054	18	0.83	1.10-1.20	.043-.047	2.00	.079	3.00 max.	.118 max.	3.40	.134	89.0	20.00	X	
19417-0054	20	0.58	1.10-1.20	.043-.047	2.00	.079	3.00 max.	.118 max.	3.40	.134	57.9	13.00	X	
19417-0054	22	0.36	1.10-1.20	.043-.047	2.00	.079	3.00 max.	.118 max.	3.40	.134	35.6	8.00	X	
19420-0010	18	0.83	1.10-1.20	.043-.047	2.00	.079	3.00 max.	.118 max.	3.40	.134	89.0	20.00	X	
19420-0010	20	0.58	1.10-1.20	.043-.047	2.00	.079	3.00 max.	.118 max.	3.40	.134	57.9	13.00	X	
19420-0010	22	0.36	1.10-1.20	.043-.047	2.00	.079	3.00 max.	.118 max.	3.40	.134	35.6	8.00	X	
19420-0012	18	0.83	1.10-1.20	.043-.047	2.00	.079	3.00 max.	.118 max.	3.40	.134	89.0	20.00	X	
19420-0012	20	0.58	1.10-1.20	.043-.047	2.00	.079	3.00 max.	.118 max.	3.40	.134	57.9	13.00	X	
19420-0012	22	0.36	1.10-1.20	.043-.047	2.00	.079	3.00 max.	.118 max.	3.40	.134	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. Select the proper locator on the locator assembly for the proper terminal. The female locator is gray and is marked with an "F". The male locator is black and is marked with an "M".
2. To position the desired locator, pull up on the knurled pin and turn 180° till the locator fits snugly in the slot. See Figure 3, Assembly Drawing.
3. Lift the wire stop blade up.
4. Insert the terminal fully into the correct die profile and the locator slot until the terminal is fully seated and stops.
5. Bring down the wire stop blade. Make sure the wire stop blade is fully seated on the terminal behind the conductor grip section.
6. 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).
7. Close the tool until the ratchet releases.
8. Lift the wire stop blade up.
9. Carefully remove the crimped terminal.

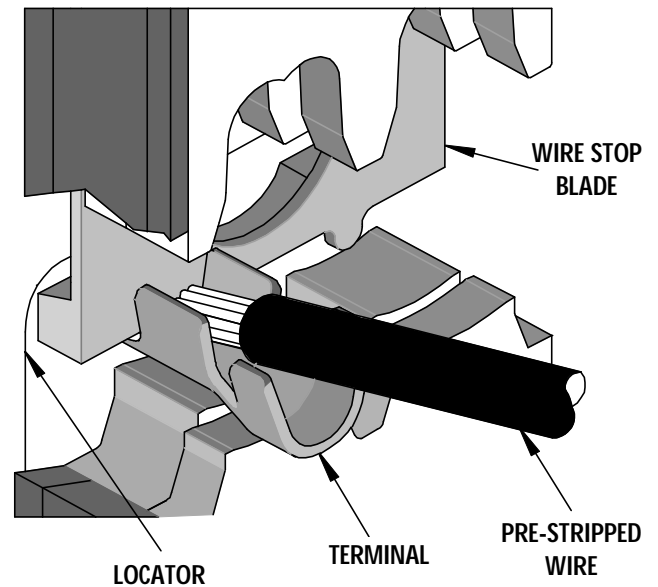


Figure 1

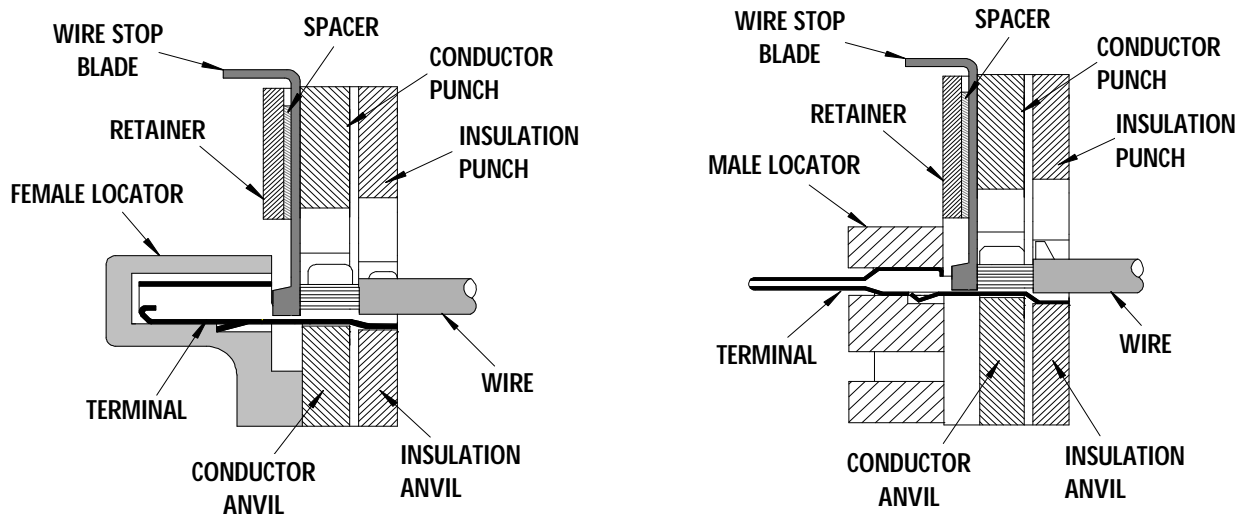


Figure 2

**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	63811-4475	Locator Assembly	1
3	63600-0525	Handle Spring	1

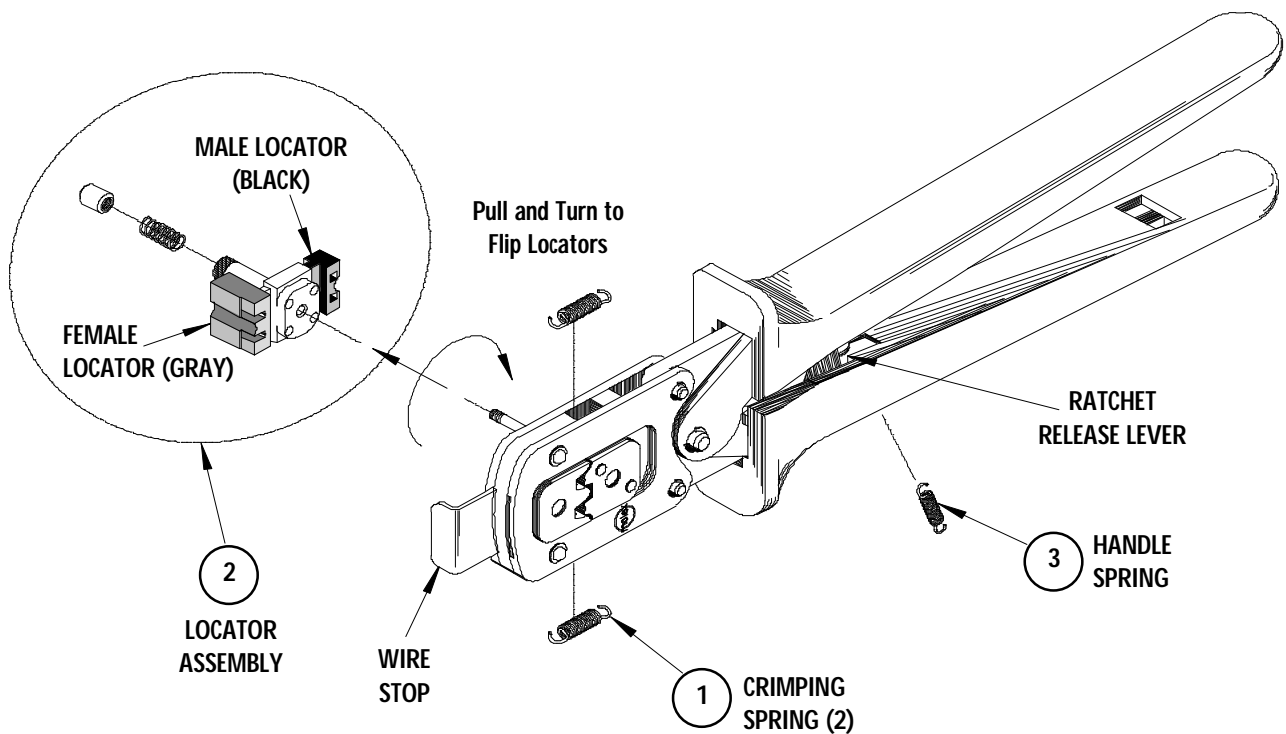


Figure 3

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