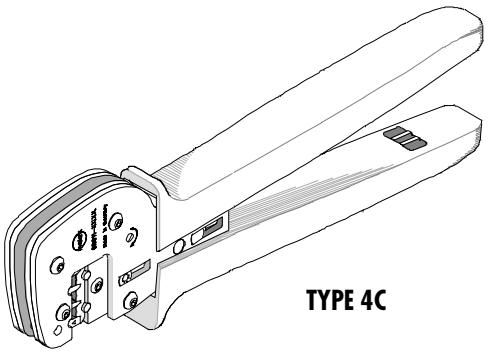
HAND CRIMP TOOL SPECIFICATION SHEET
Order No. 63811-7200



TYPE 4C

FEATURES

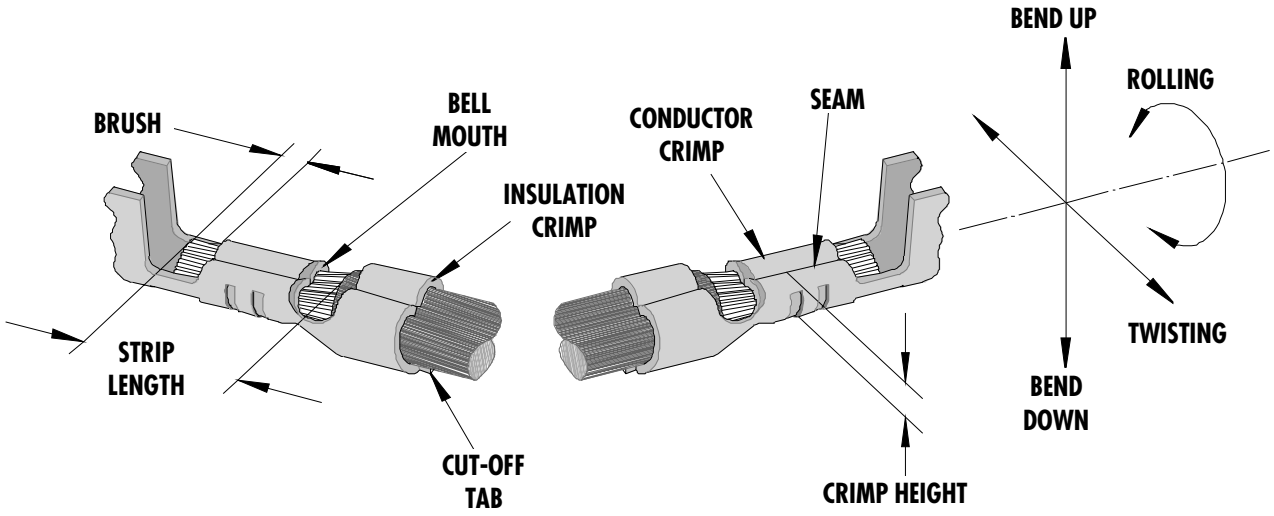
- A full cycle ratcheting hand tool ensures complete crimps
- Ergonomic soft grip handles for comfortable crimping
- A precision user-friendly terminal locator wire stop holds terminals in the proper crimping position
- This tool is IPC/WHMA-A-620 Class 2 and RoHS compliant

SCOPE

Products: Sabre™ Flat Blade Crimp Terminal, 14-18 AWG.

Terminal Series No.	Terminal Order No.		Wire Size		Ⓟ Insulation Diameter		Strip Length	
	🌡 Available in Reel form only		AWG	mm²	mm	in	mm	in
43178	🌡 43178-1001	🌡 43178-5001	18	0.80	2.36-3.56	.093-.140	3.96-5.54	.156-.218
	🌡 43178-1002	🌡 43178-5002						
43374 and 43375	🌡 43374-0001	🌡 43375-0001	14-18	2.00-0.80	2.36-3.56	.093-.140	3.96-5.54	.156-.218
🌡 Follow the Cut-Off Tab specifications on Applicator specification sheets. Ⓟ See Conditions on Page 2.								

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		Conductor				Pull Force Minimum		Profile		
			Crimp Height (Ref)		Crimp Width (Ref)						
	AWG	mm^2	mm	In.	mm	In.	N	Lb.	A	B	C
43178	18	0.80	1.78-1.88	.070-.074	3.20	.126	88.9	20.0	X		
43374 and 43375	14	2.09	1.65-1.75	.065-.069	2.50	.098	222.4	50.0		X	
	16	1.33	1.38-1.48	.054-.058	2.50	.098	133.4	30.0			X
	18	0.82	1.35-1.43	.053-.056	2.50	.098	88.9	20.0			X

Ⓟ **To Achieve IPC-A-620 Class 2 Crimps, the following over-all wire insulation diameter ranges are recommended:**

1. Profile A: 2.36-3.56mm (.093-.140 inch)
2. Profile B: 2.79-3.56mm (.110-.140 inch)
3. Profile C: 2.36-3.14mm (.093-.124 inch)

Pull Force should be measured with no influence from the insulation crimp.
The above specifications are guidelines to an optimum crimp.

OPERATION

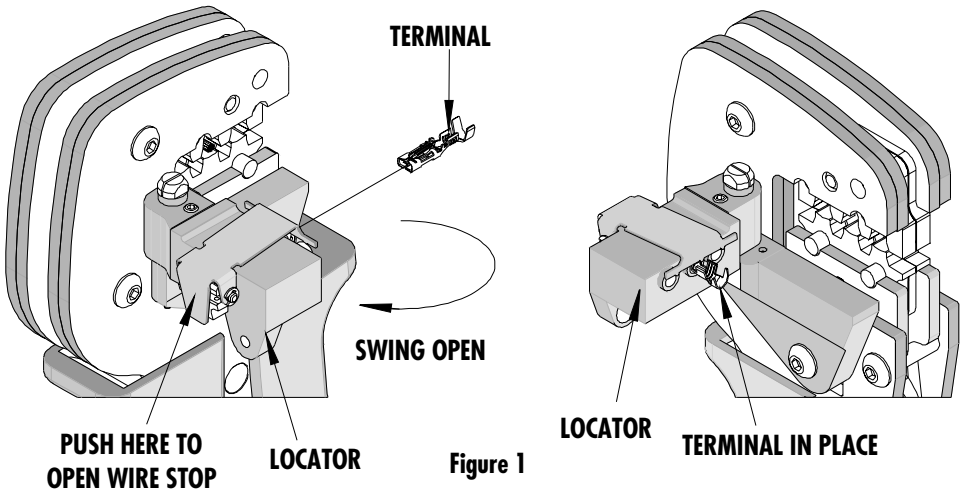


Figure 1

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. Swing the terminal locator away from the crimp tool shown in Figure 1. Some terminals with large insulation grips may interfere with the crimp tooling when swinging the locator into position. The terminal must then be loaded into the locator in the closed/crimp position. See Figure 2.

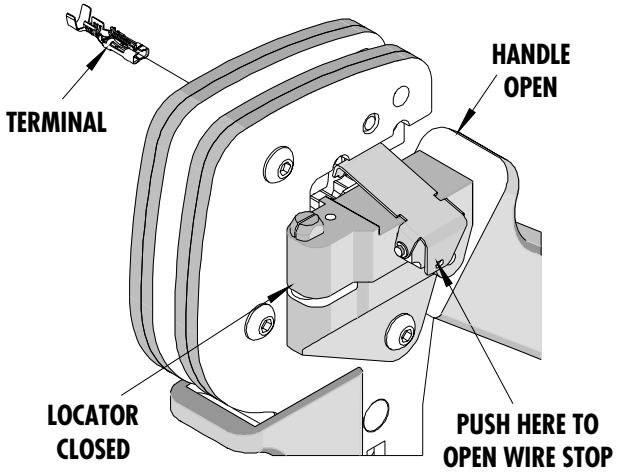


Figure 2

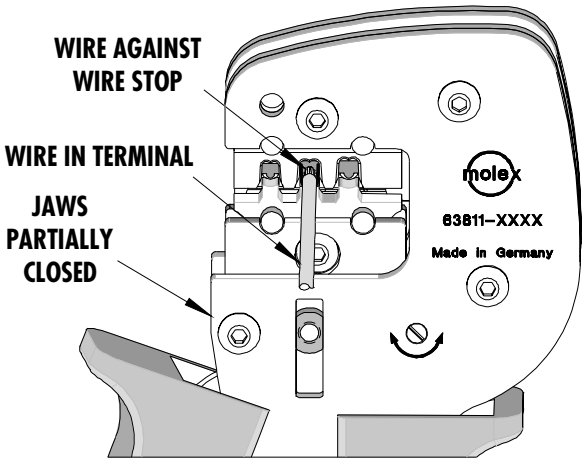


Figure 3

3. Press down on the wire stop on the locator as shown in Figure1. Insert the proper terminal into the proper nest opening. Make sure when choosing the nest opening, it will correspond with the A, B or C profile on the hand tool.
4. Return the locator to its original position.
5. Insert the proper wire over the terminal. Gently touch the wire stop with the end of the wire. See Figure 3 and 4.
6. 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.

7. Remove the crimped terminal from the terminal locator by pressing down on the wire stop and gently pulling on the wire. The terminal locator can be in either position.
8. Visually inspect the crimped terminal for proper crimp location.

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 very slightly. An occasional, destructive, pull force test should be preformed to check hand tool crimp. Pull Force value must exceed the minimum pull force specifications listed.

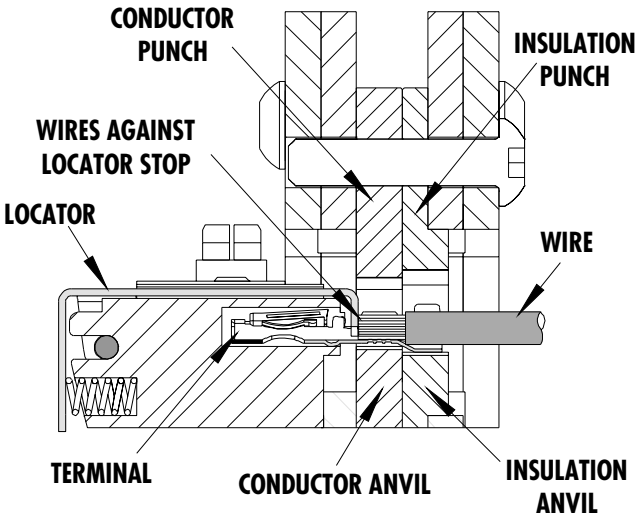


Figure 4

Locator Replacement

See the parts list on the last page of this document for the proper locator order number. Follow the steps below to replace the locator.

1. Open the crimp hand tool.
2. Swing the existing locator open and away from the hand tool.
3. Firmly press down on the brass pivot shaft with your thumb, while pulling the locator up. Slip the locator off the top of the brass pivot shaft. See Figure 5.
4. Replace it with the proper locator by putting over the brass pivot shaft and snapping it into place.

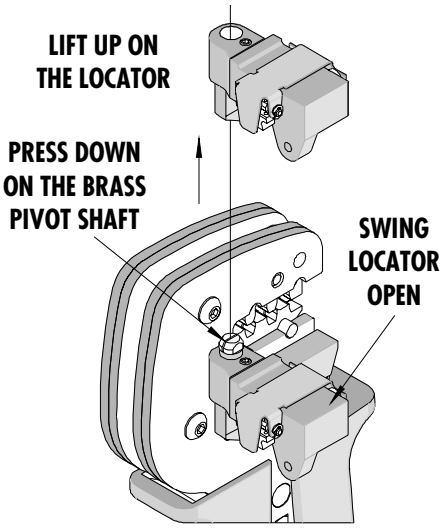


Figure 5

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. The tool was engineered for durability but like any equipment it needs cleaning and lubrication for a maximum service life of trouble free crimping. Use light oil (30 weight automotive oil), at all the oil points, every 5,000 crimps or 3 months. This will significantly enhance the tool life. See Figure 6.
4. Wipe excess oil from hand tool, particularly from crimping area. Oil transferred from the crimping area onto certain terminations may affect the electrical characteristics of an application.
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.

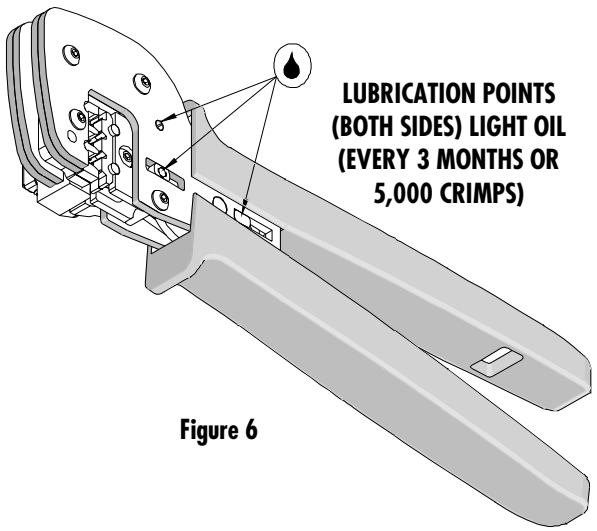


Figure 6

Miscrimps or Jams (See Figure 7)

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 rotating the small slotted screw marked with an arrow. See Figure 7.

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.

Hand held crimping tools are intended for low volume, prototyping, or repair requirements only.

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 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.

CAUTION: Repetitive use of this tool should be avoided.

Certification

Molex does not certify or re-certify commercial grade 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.
- When the hand tool is no longer capable of achieving minimum pull force, it should be taken out of service and replaced.
- This tool is very difficult to disassemble and reassemble. Customer repair is not recommended.

PARTS LIST

Item Number	Order Number	Description	Quantity
1	63811-5573	Locator Base	1
2	63811-7275	Locator Assembly	1

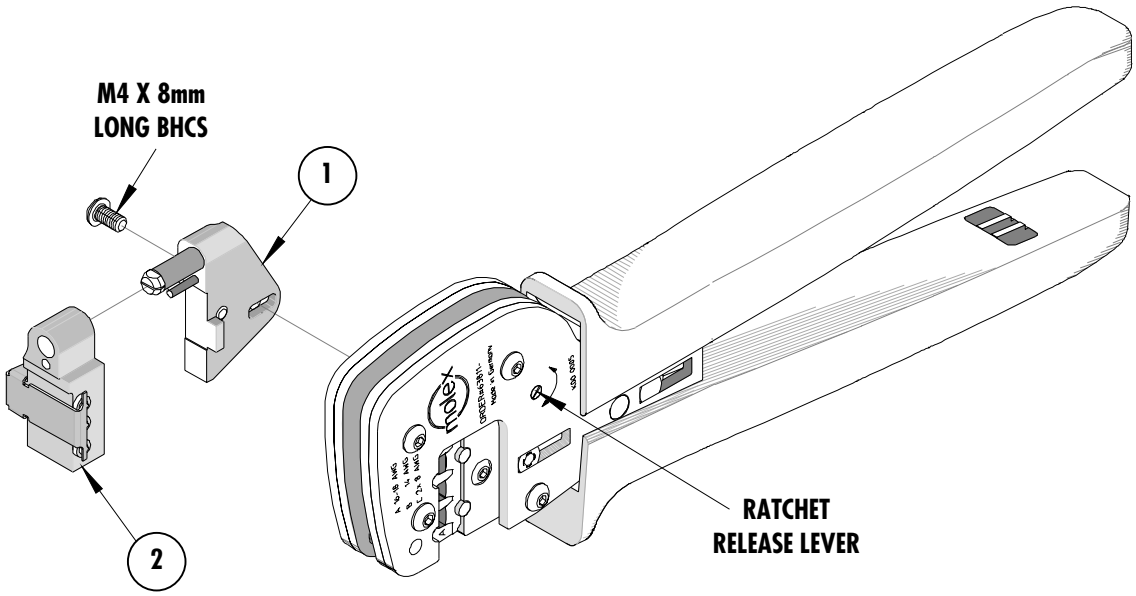


Figure 4

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