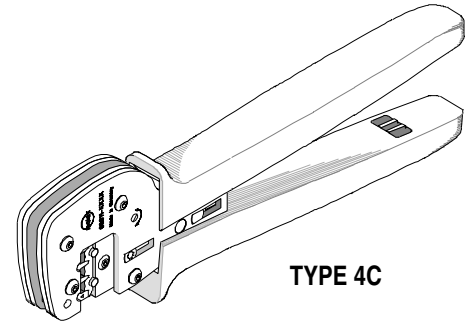# HAND CRIMP TOOL
SPECIFICATION SHEET
Order No. 63811-5300

TYPE 4C

FEATURES

▌ A full cycle ratcheting hand tool ensures complete crimps
▌ Ergonomically designed soft handles
▌ Precisely designed crimping profiles with simple contact positioning
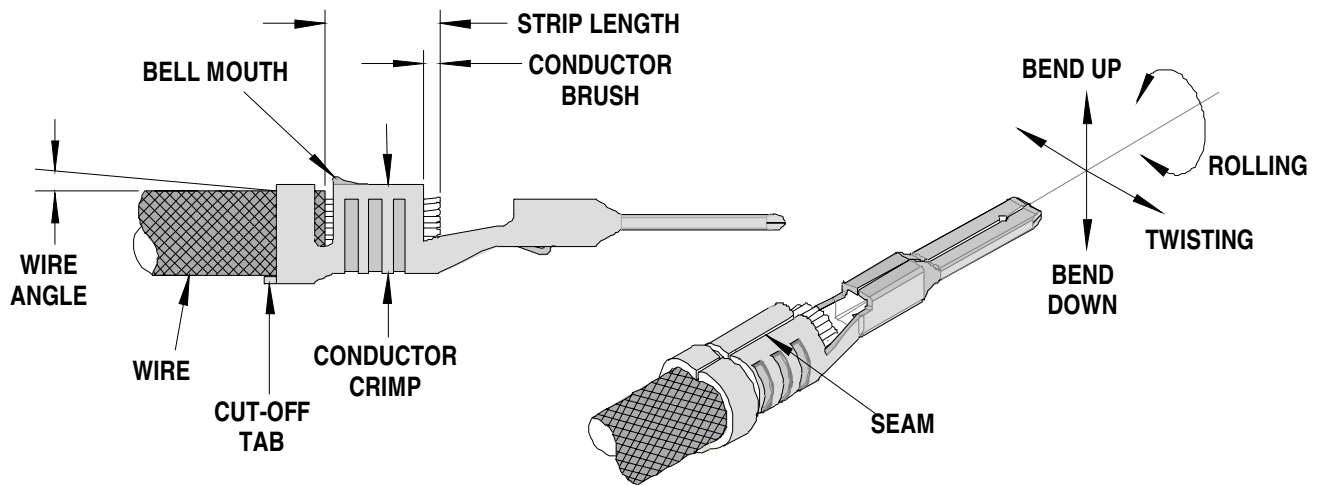▌ Easy handling due to outstanding force ratio

SCOPE

Products: MX150L™ 10-12 AWG

Terminal Series No.	Terminal Order No.		Wire Size		Insulation Diameter		Strip Length	
	Loose Piece	🌡 Reel	AWG	mm²	mm	In.	mm	In.
19431	19431-0016	19431-0001	10-12	5.26-3.31	3.90-4.85	.153-.191	5.50-6.20	.217-.244
19434	19434-0003	19434-0001	10-12	5.26-3.31	3.90-4.85	.153-.191	5.50-6.20	.217-.244
🌡 Customer to cut off terminal from reel: 0.50mm (.020") maximum Cut-off Tab.								

DEFINITION OF TERMS

STRIP LENGTH
CONDUCTOR BRUSH
BELL MOUTH
BEND UP
ROLLING
TWISTING
WIRE ANGLE
BEND DOWN
WIRE
CUT-OFF TAB
CONDUCTOR CRIMP
SEAM

CRIMP SPECIFICATION

Terminal Series No.	Bell Mouth		Bend up	Bend down	Twist	Roll	Conductor Brush		Wire Angle
	mm	In.	Degree		Degree		mm	In.	Degree
19431	0.25-1.25	.010-.049	2	3	4	8	0.10-0.50	.004-.020	5° Max
19434	0.25-1.25	.010-.049	2	3	4	8	0.10-0.50	.004-.020	5° Max
Seam: Seam shall not be open and no wire allowed out of the crimping area.									

CONDITIONS:

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

Terminal Series No.	Wire Size		Conductor				Insulation				Pull Force Minimum	
			Crimp Height (Ref)		Crimp Width (Ref)		Crimp Height (Ref)		Crimp Width (Ref)			
	AWG	mm²	mm	In.	mm	In.	mm	In.	mm	In.	N	Lb.
19431	10	5.26	2.45-2.55	.096-.100	3.70-3.90	.146-.154	5.00 Max	.197 Max	5.10-5.30	.201-.209	356.0	80.0
	12	3.31	2.05-2.15	.081-.085	3.70-3.90	.146-.154	4.50 Max	.177 Max	5.00-5.20	.197-.205	311.5	70.0
19434	10	5.26	2.45-2.55	.096-.100	3.70-3.90	.146-.154	5.00 Max	.197 Max	5.10-5.30	.201-.209	356.0	80.0
	12	3.31	2.05-2.15	.081-.085	3.70-3.90	.146-.154	4.50 Max	.177 Max	5.00-5.20	.197-.205	311.5	70.0

OPERATION

CAUTION: Install only Molex terminals listed above with this tool. Do not crimp hardened objects - 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.
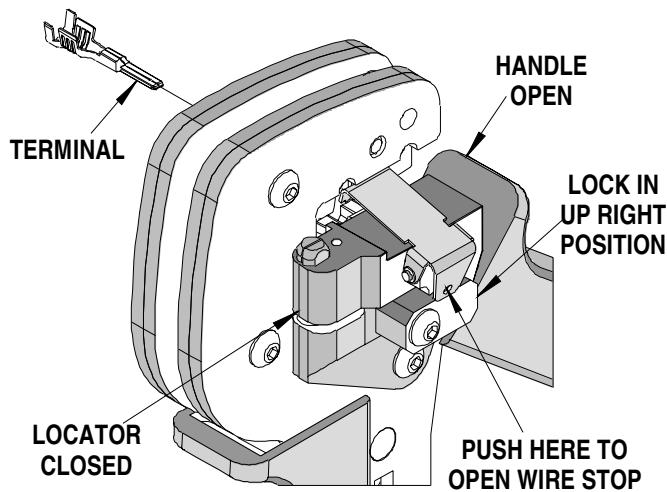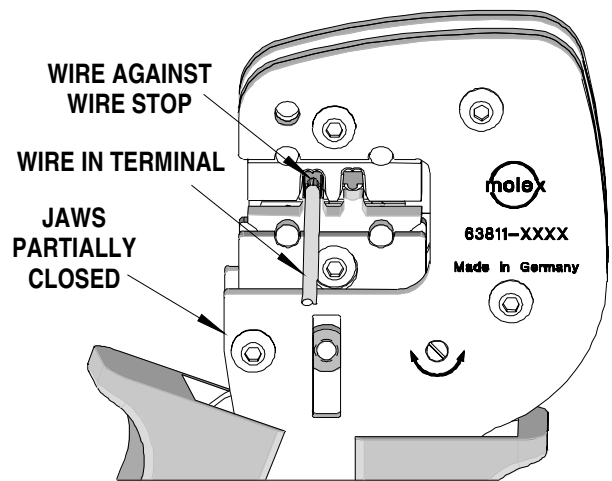

Figure 1

Figure 2

Crimping Terminals

Swing the terminal locator against the crimp tool and turn the lock up to lock the locator. Terminals can be loaded easily while the locator is against the crimp tool and locked. The spring-loaded locator needs to be in the up position for terminals to load easily.

1. To raise the wire stop, press the tab on the wire stop as shown in Figure 1. Insert the proper terminal into the nest opening and release the wire stop to lower it.
2. Insert the proper pre-striped wire over the terminal. Gently touch the wire stop with the end of the wire. See Figure 2 and 3.
3. 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.

4. Remove the crimp terminal from the terminal locator by pressing the tab on the wire stop and gently pulling on the wire.
5. Visually inspect the crimped terminal for proper crimp location and crimp height.

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.
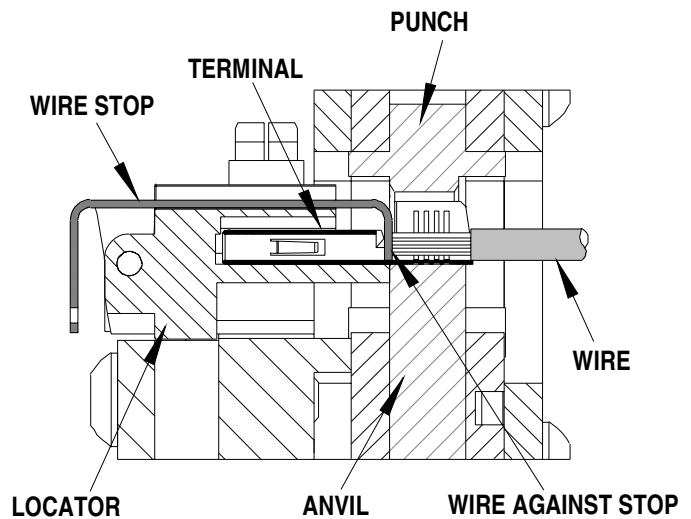
Figure 3

Miscrimps or Jams (See Figure 4)

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 4.

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 affect crimp height. A crimp height chart is provided with this manual as Reference Only.
3. 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.
4. An occasional destructive pull force test should be performed to check hand tool crimp. Pull force should be used as the final criteria for an acceptable crimp. Pull force values Must exceed the Minimum pull force specifications listed on pages 2 and 3. Refer to Molex Quality Crimping Handbook 63800-0029 for additional information on crimping and crimp testing.
5. Molex does not certify crimp hand tools.
6. This tool is very difficult to disassemble and reassemble. Customer repair is not recommended.

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

PARTS LIST

Item Number	Order Number	Description	Quantity
1	63811-4773	Locator Base with Lock	1
2	63811-5375	Locator	1

**M4 X 8mm
LONG BHCS**

1

2

**RATCHET
RELEASE SCREW**

Figure 4