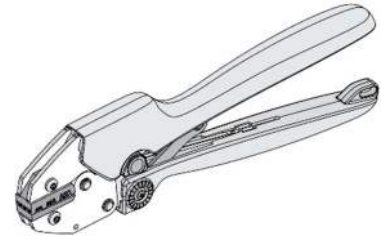




Order No. 200218-3100



## Application Tooling Specification

### FEATURES

- A full cycle ratcheting hand tool ensures complete crimps
- Long handles for comfortable crimping with reduced crimping force and a safety release
- Well balanced and easy-to-use side entry tool for wire ferrules
- Rectangular crimp shape works best with rectangular terminal block openings

### SCOPE

Hand tool for crimping rectangular profiles on wire ferrules manufactured to UL486F, Forms A and C.

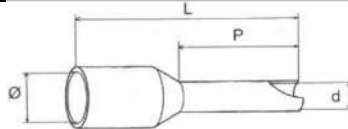
**Products:** Wire ferrules 10-25mm<sup>2</sup> (8-4 AWG).

#### Molex Ferrules

Terminal	Color	AWG	mm <sup>2</sup>	Ø	d	P	L	Strip Length*
93602-0049	Brown	8*	10	7.6	4.5	12	20.8	(15)
93602-0050	Red	8*	10	7.6	4.5	12	20.8	(15)
93602-0051	White	8*	10	7.6	4.5	12	20.8	(15)
93602-0052	Brown	8*	10	7.6	4.5	18	26.8	(21)
93602-0053	Red	8*	10	7.6	4.5	18	26.8	(21)
93602-0054	White	8*	10	7.6	4.5	18	26.8	(21)
93602-0055	Green	6	16	8.8	5.8	12	22	(17)
93602-0056	Blue	6	16	8.8	5.8	12	22	(17)
93602-0057	White	6	16	8.8	5.8	12	22	(17)
93602-0058	Green	6	16	8.8	5.8	18	28	(23)
93602-0059	Blue	6	16	8.8	5.8	18	28	(23)
93602-0060	White	6	16	8.8	5.8	18	28	(23)
93602-0061	Black	4*	25	11.2	7.5	16	28	(21)
93602-0062	Brown	4*	25	11.2	7.5	16	28	(21)
93602-0063	Yellow	4*	25	11.2	7.5	16	28	(21)
93602-0064	Black	4*	25	11.2	7.5	22	34	(27)
93602-0065	Brown	4*	25	11.2	7.5	22	34	(27)
93602-0066	Yellow	4*	25	11.2	7.5	22	34	(27)

\*Strip length is for reference as this length can vary based on differences in insulation diameters.

Adjust strip length as necessary to achieve approximately 1mm of wire strands beyond connector after crimping.



**CONDITIONS**

After crimping, the ferrule should meet the following minimum pull force specifications:

Wire Size		Pull Force Minimum	
AWG	mm <sup>2</sup>	N	Lb.
8	10	90	20.23
6	16	100	22.48
4	25	135	30.35

**OPERATION**

1. Insert a properly stripped wire into the ferrule connector and cycle the tool through a full cycle to open the jaws of the tool. See Figure 1.
2. Place the ferrule connector with the wire onto the lower jaw of the hand tool, ensuring that the end of the ferrule does not extend beyond the side face of the jaws. See Figure 2.

- **Warning:** Extending the ferrule connector beyond the face of the jaws will produce parts of the ferrule connector that will not be crimped, potentially resulting in an undesired mate connection.

3. Partially close the tool to hold the ferrule connector in place. Verify that the wire is properly inserted into the connector. See Figure 3.
4. Cycle the tool through a full cycle to complete the crimp.

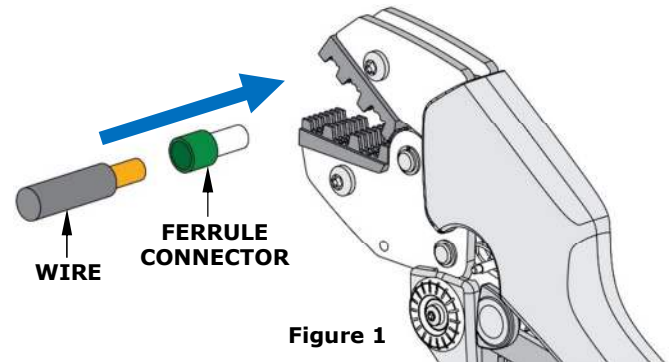


Figure 1

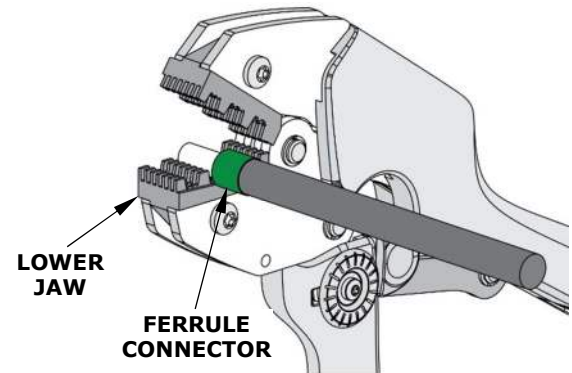


Figure 2

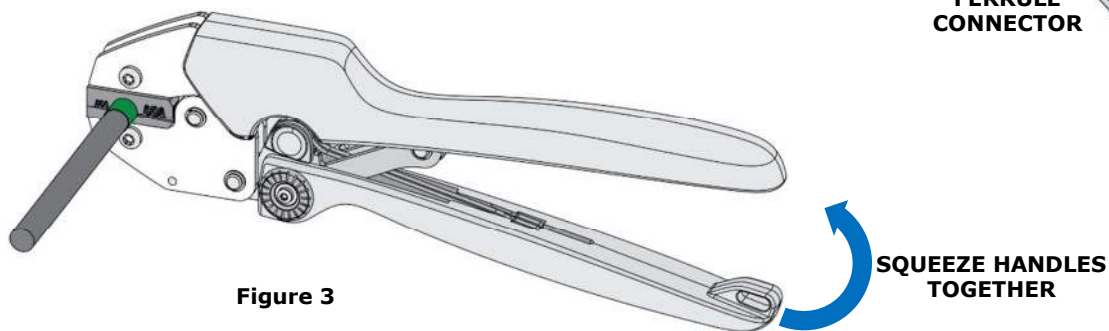


Figure 3

**Note:** The tamper-proof ratchet action will not release the tool until it has been fully closed.

5. Remove the crimped connector and inspect for proper crimp location.

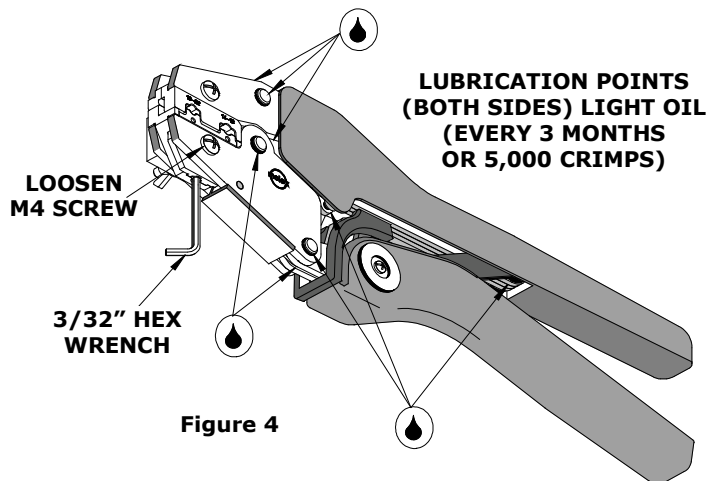
## MISCRIMPS OR JAMS

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 5.

## MAINTENANCE

It is recommended that each operator of the tool be made aware of and responsible for the following maintenance steps:

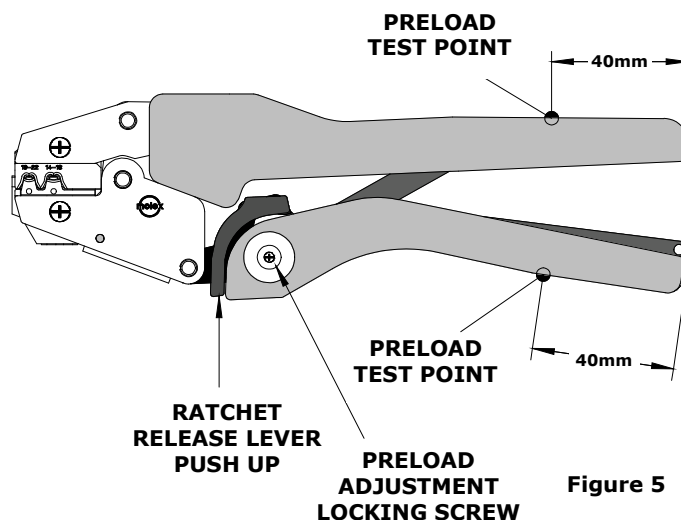
1. Remove dust, moisture and other contaminants with a clean brush or a soft, lint-free cloth.
2. Do not use any abrasive materials that could damage the tool.
3. Make certain all pins, pivot points and bearing surfaces are protected with a thin coat of high-quality machine oil. Do not oil excessively. This hand tool was engineered for durability, but like any fine piece of equipment, it needs cleaning and lubrication for a maximum service life of trouble-free crimping. A light oil such as a 30 weight automotive oil used at the oil points shown in Figure 4 every 5,000 crimps or 3 months will significantly enhance the tool life and ensure a stable calibration.
4. When the 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.



## HOW TO ADJUST TOOL PRELOAD (See Figure 5)

Over the life of the tool, it may be necessary to adjust tool handle preload 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 plastic cover washer. Note the setting wheel position.
2. Lift the setting wheel off of the axle. Turn the eccentric axle with a screwdriver.
3. Turning the eccentric wheel counterclockwise will increase handle force.
4. Replace the setting wheel to the axle, aligning the nearest notch in the setting wheel to the dowel pin.
5. Replace the plastic cover washer and screw.
6. Check the crimp specifications after tool crimp force is adjusted.



## WARRANTY

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This tool is for electrical ferrule 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, Molex 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.

**CAUTION:** Repetitive use of this tool should be avoided.

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

## CAUTIONS

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1. Manually powered hand tools are intended for low-volume use 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 ferrules specified for crimping with this tool.

## NOTES

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1. This tool should only be used for the ferrules and wire gauges specified on this sheet.
2. This tool is intended for standard conductor sizes.
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 are damaged or worn, a new tool must be purchased.
4. Molex does not certify crimp hand tools.

**PARTS LIST**

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Item	Order Number	Description	Quantity
REF	200218-3100	Hand Crimp Tool	Figure 6
1	64000-0076	Repair Kit (Springs, Pins and E-Rings)	1

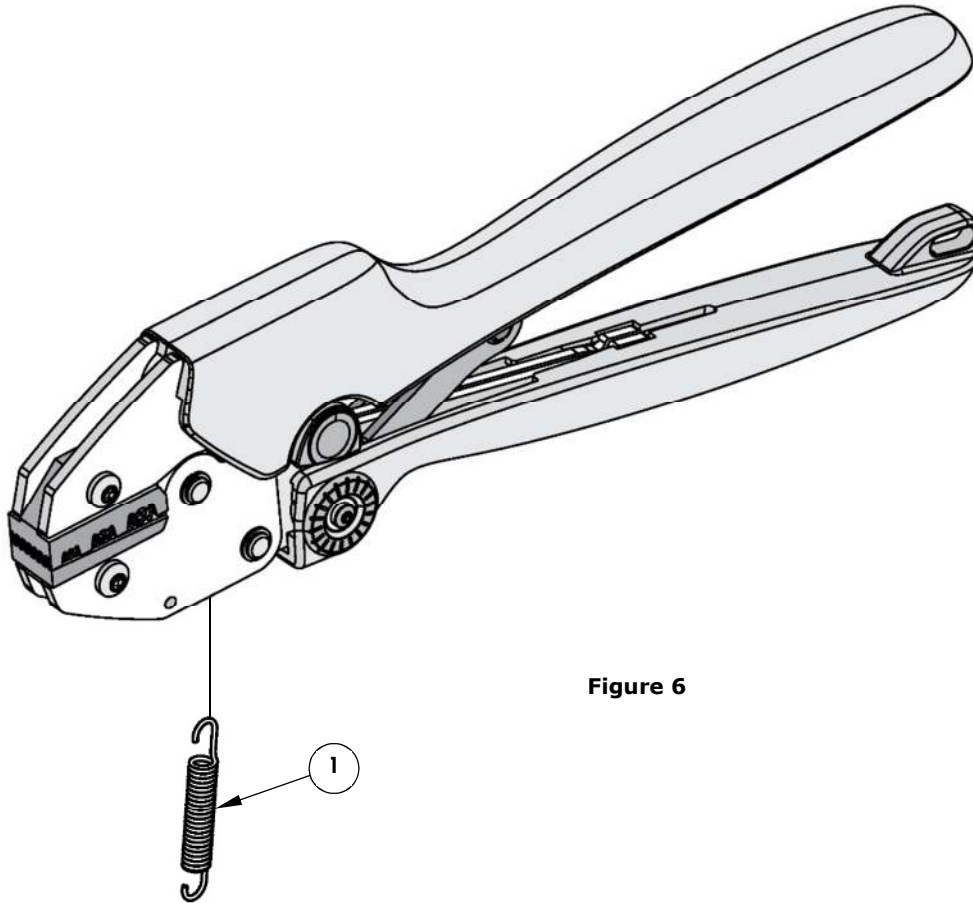


Figure 6

**Application Tooling Support**

**Phone:** (402) 458-TOOL (8665)

**E-Mail:** [applicationtooling@molex.com](mailto:applicationtooling@molex.com)

**Website:** [www.molex.com/applicationtooling](http://www.molex.com/applicationtooling)

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