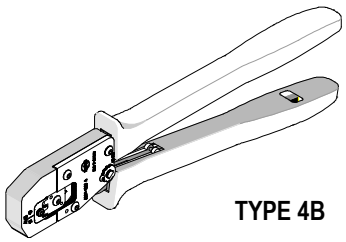
HAND CRIMP TOOL

molex

Application Tooling Specification Sheet



TYPE 4B

Order No. 63811-1600

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

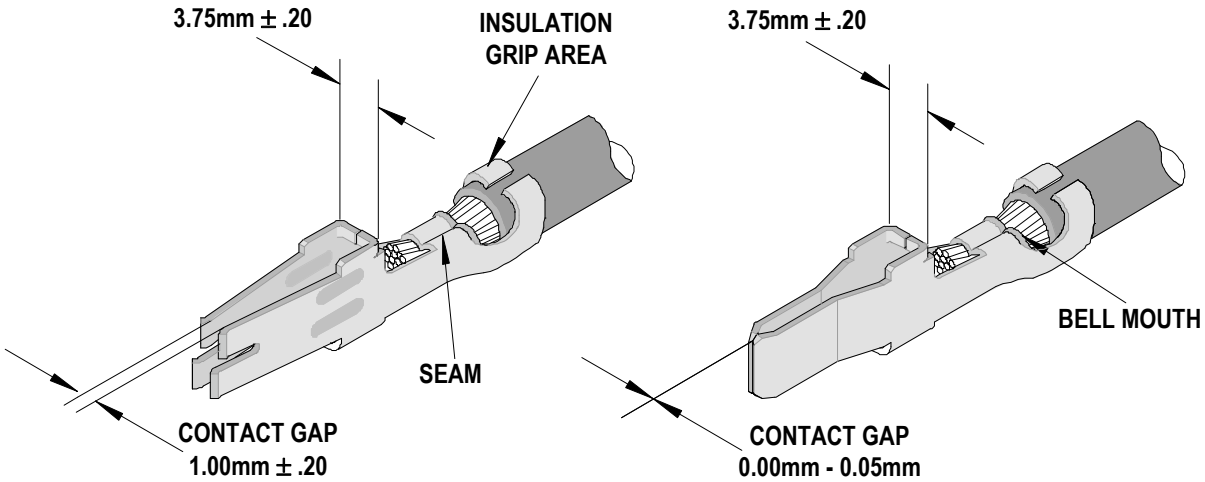
SCOPE

Products: 10.00 mm (.394") Pitch Mini-Fit Sr.™ Crimp Terminals, 10-12 AWG.

Terminal Series No.	Terminal Order No.			Wire Size		Insulation Diameter		Strip Length	
	Loose Piece	✳Reel		AWG	mm²	mm	In.	mm	In.
42815		42815-0010	42815-0011	10-12	N/A	3.50-5.30	.138-.209	7.49-8.51	.295-.335
		42815-0012	42815-0018						
		42815-0114							
42817		42817-0010	42817-0011	10-12	N/A	3.50-5.30	.138-.209	7.49-8.51	.295-.335
		42817-0012	42817-0018						
		42817-0019	42817-0110						
		42817-0111	42817-0112						
		42817-1014	42817-1114						

✳Customer to cut off terminal from reel: 0.5mm (.020") maximum Cut-off Tab.
* Crimp terminals to stranded copper wire only.

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 3).

Terminal Series No.	Wire Size		Conductor Crimp				Insulation Crimp		Pull Force Minimum		Profile	
			Height (Ref)		Width (Ref)		Width (Ref)					
	AWG	mm^2	mm	In.	mm	In.	mm	In.	N	Lb.	10	12
42815	10	N/A	2.69-2.79	.106-.110	3.65	.144	5.80	.228	356.0	80.00	X	
	12	N/A	2.39-2.49	.094-098	3.65	.144	5.40	.213	311.0	70.00		X
42817	10	N/A	2.69-2.79	.106-.110	3.65	.144	5.80	.228	356.0	80.00	X	
	12	N/A	2.39-2.49	.094-098	3.65	.144	5.40	.213	311.0	70.00		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. Place the terminal into the correct die profile (10 or 12) until the terminal stopped by the locator.
2. Partially close the tool until the terminal is held in place.
3. Place a pre-striped wire into the terminal and align the wire with the conductor and insulation grips visually. See Figure 1.
4. Close the tool until the ratchet releases.
5. Carefully remove the crimped terminal.

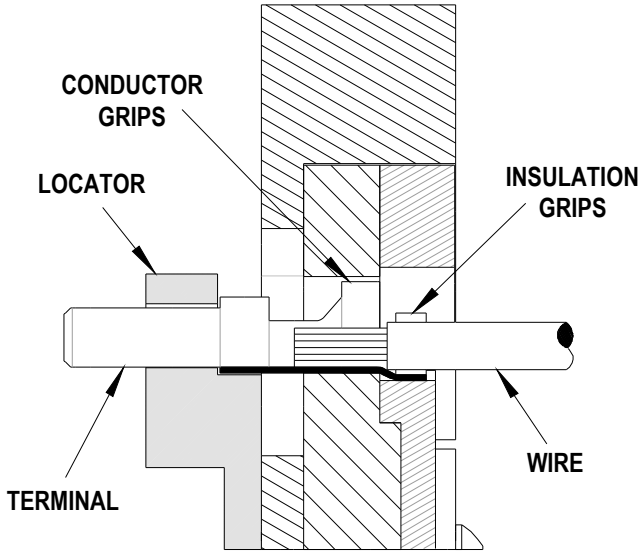


Figure 2

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

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 other equipment it needs cleaning and lubrication for a maximum service life of trouble free crimping. Light oil (such as 30 weight automotive oil) used at the oil points, every 5,000 crimps or 3 months, will significantly enhance the tool life.

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.

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 rotating the slotted screw on the locator (back) side of the hand tool. See Figure 3.

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.

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	Molex tooling crimp specifications are valid only when used with Molex terminals and tooling manufactured by Molex or authorized distributors ("Molex Tooling"). When using tooling other than Molex Tooling with specific Molex specific connector systems listed in our ATS documents, the Molex tooling qualification does not apply and the responsibility for full qualification of the connector system is that of the customer. Molex accepts no liability for connector performance or tooling support where tooling other than Molex Tooling is used, or where Molex Tooling is modified.
 CAUTION	A-620 and other industry standards do not supersede the manufacturer's specifications. Some terminals designed over 20 years ago may not meet the desired physical attributes for some of today's standards. However, these terminals will still perform electrically at an acceptable quality level based on the qualification testing and years of successful performance in the field.

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.
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. Refer to Molex Quality Crimping Handbook 63800-0029 for additional information on crimping and crimp testing.
6. Molex does not certify crimp hand tools.
7. Hand held crimping tools are intended for low volume, prototyping, or repair requirements only.

CAUTION: Repetitive use of this tool should be avoided.

PARTS LIST

Item Number	Order Number	Description	Quantity
1	63811-1575	Locator	1

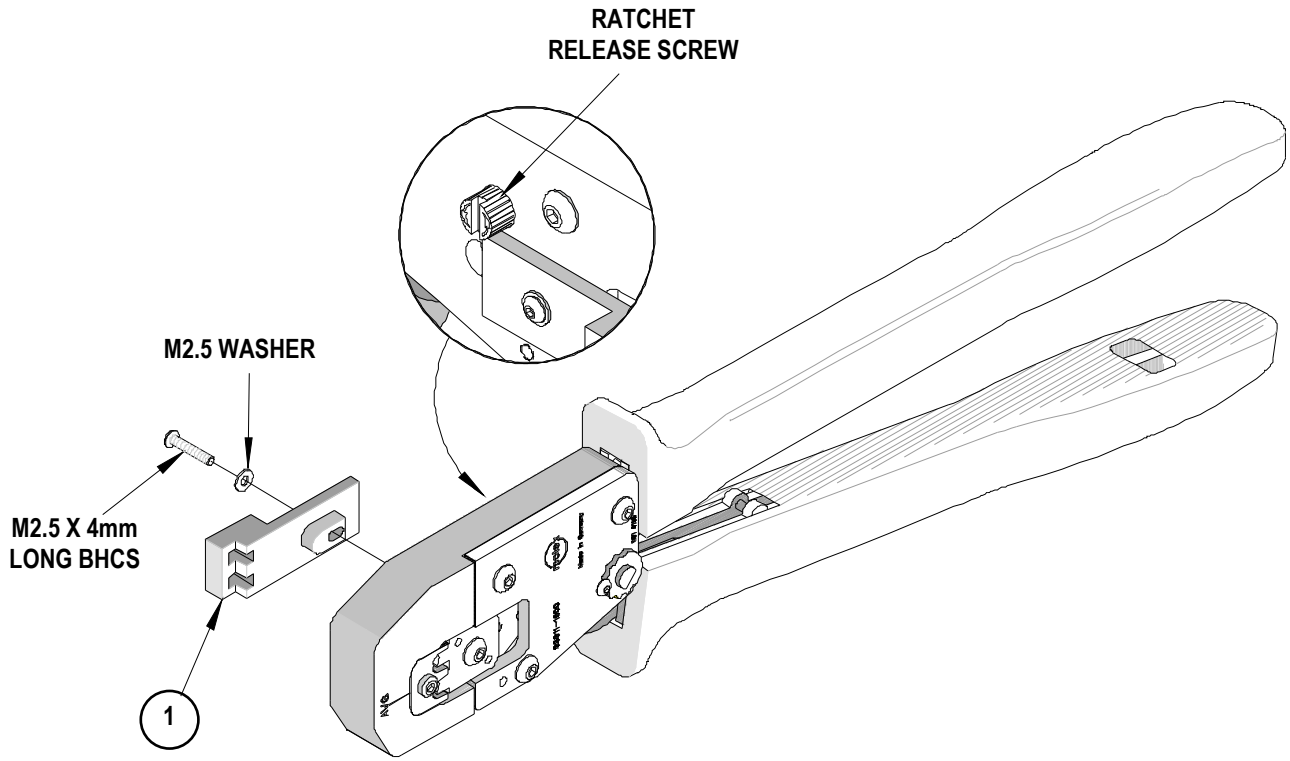


Figure 3

Application Tooling Support
2200 Wellington Court
Lisle, IL 60532 USA
Direct +1-402-458-TOOL (8665)

Visit our website at www.molex.com/applicationtooling