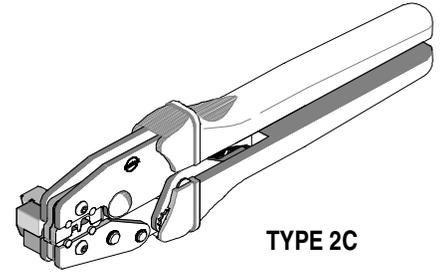




**HAND CRIMP TOOL
SPECIFICATION SHEET**
Order No. 63811-3300
(Replaces 11-01-0008
HTR1719C)



TYPE 2C

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

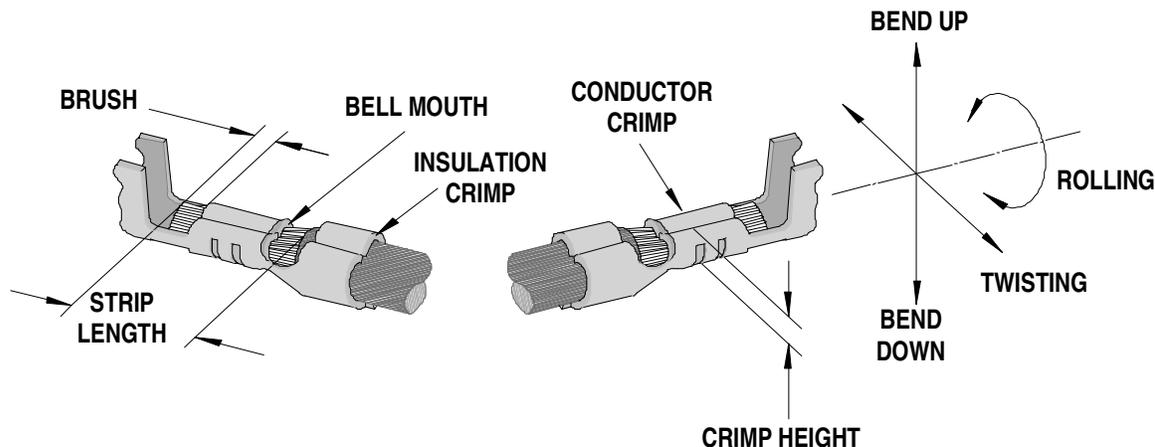
Products: 1.57mm (.062") Diameter, Standard .062" Pin and Socket Crimp Terminal, 18-24 AWG.
KK® Crimp Terminal, Flat Blade Crimp Terminal, and
4.80mm (.189") Pitch Crimp Terminal, 18-24 AWG.

Terminal Series No.	Terminal Order No.				Wire Size		◆Insulation Diameter		Strip Length	
	Loose Piece		*Reel		AWG	mm ²	mm	In.	mm	In.
1560	02-06-2103	02-06-6119	02-06-2101	02-06-6118	18-24	0.82-0.20	1.52-3.05	.060-.120	2.41-3.04	.095-.120
	02-06-6102	04-01-0807	02-06-6100	04-01-0805						
	02-06-6103	39-00-0327	02-06-6101	39-00-0328						
	02-06-6104	39-00-0330	02-06-6105	39-00-0329						
	02-06-6112		02-06-6116	39-00-0378						
1561	02-06-1103	04-01-0808	02-06-1101	02-06-5108	18-24	0.82-0.20	1.52-3.05	.060-.120	2.41-3.04	.095-.120
	02-06-5102	39-00-0331	02-06-1118	04-01-0806						
	02-06-5103	39-00-0334	02-06-5100	39-00-0279						
	02-06-5104		02-06-5101	39-00-0333						
	02-06-5109		02-06-5105							
1786	02-06-2202	02-06-6206	02-06-2201	02-06-6205	18-24	0.82-0.20	1.52-3.05	.060-.120	2.41-3.04	.095-.120
	02-06-6202	02-06-6212	02-06-6201	02-06-6211						
1787	02-06-1202	02-06-5202	02-06-1201	02-06-5201	18-24	0.82-0.20	1.52-3.05	.060-.120	2.41-3.04	.095-.120
	02-06-3201	02-06-5206	02-06-3200	02-06-5205						
1799	08-30-0110	08-34-0110	08-30-0109	08-34-0109	18-24	0.82-0.20	1.52-3.05	.060-.120	2.41-3.04	.095-.120
	08-34-0106	08-35-0106	08-34-0105	08-35-0105						
	08-34-0108		08-34-0107							
1943	05-06-0201	05-06-0206	05-06-0200	05-16-0200	18-24	0.82-0.20	1.52-2.79	.060-.110	2.41-3.04	.095-.120
	05-06-0204		05-06-0205	05-16-0201						
	05-06-0203		05-06-0211							
4529	02-06-1105	02-06-5208	02-06-1104	02-06-5207	18-24	0.82-0.20	1.52-3.05	.060-.120	2.41-3.04	.095-.120
	02-06-5118	02-06-5218	02-06-5117							
5005	08-70-0042	39-00-0014	08-70-0001	39-00-0013	18-24	0.82-0.20	1.30-3.00	.051-.118	2.30-2.95	.090-.116
	08-70-1012		08-70-1011							
5006	08-70-0043	39-00-0016	08-70-0002	39-00-0015	18-24	0.82-0.20	1.30-3.00	.051-.118	2.30-2.95	.090-.116
	08-70-1014		08-70-1013							
6770			02-06-5142		18-24	0.82-0.20	1.52-3.05	.060-.120	2.41-3.04	.095-.120
6772			02-06-6140		18-24	0.82-0.20	1.52-3.05	.060-.120	2.41-3.04	.095-.120

Terminal Series No.	Terminal Order No.			Wire Size		◆ Insulation Diameter		Strip Length	
	Loose Piece	* Reel		AWG	mm ²	mm	In.	mm	In.
7291			02-06-1139	18-24	0.82-0.20	1.52-3.05	.060-.120	2.41-3.04	.095-.120
8662	16-02-0050		16-02-0049	18-24	0.82-0.20	1.52-2.79	.060-.110	2.41-3.04	.095-.120
8960			16-02-0053	18-24	0.82-0.20	1.52-2.79	.060-.110	2.41-3.04	.095-.120

* 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 5).

Terminal Series No.	Hand Tool Locator	Wire Size		Conductor Crimp Height (REF)		Conductor Crimp Width (Ref)		Pull Force Minimum		Profile	
		AWG	mm ²	mm	In.	mm	In.	N	Lb.	A	B
1560	1	18	0.82	1.02-1.12	.040-.044	1.95	.077	89.0	20.00	X	
	1	20	0.52	0.87-0.97	.034-.038	1.95	.077	66.8	15.00		X
	1	22	0.32	0.87-0.97	.034-.038	1.95	.077	44.5	10.00		X
	1	24	0.20	0.87-0.97	.034-.038	1.95	.077	35.6	8.00		X
1561	1	18	0.82	1.02-1.12	.040-.044	1.95	.077	89.0	20.00	X	
	1	20	0.52	0.87-0.97	.034-.038	1.95	.077	66.8	15.00		X
	1	22	0.32	0.87-0.97	.034-.038	1.95	.077	44.5	10.00		X
	1	24	0.20	0.87-0.97	.034-.038	1.95	.077	35.6	8.00		X
1786	1	18	0.82	1.02-1.12	.040-.044	1.95	.077	89.0	20.00	X	
	1	20	0.52	0.87-0.97	.034-.038	1.95	.077	66.8	15.00		X
	1	22	0.32	0.87-0.97	.034-.038	1.95	.077	44.5	10.00		X
	1	24	0.20	0.87-0.97	.034-.038	1.95	.077	35.6	8.00		X
1787	1	18	0.82	1.02-1.12	.040-.044	1.95	.077	89.0	20.00	X	
	1	20	0.52	0.87-0.97	.034-.038	1.95	.077	66.8	15.00		X
	1	22	0.32	0.87-0.97	.034-.038	1.95	.077	44.5	10.00		X
	1	24	0.20	0.87-0.97	.034-.038	1.95	.077	35.6	8.00		X
1799	2	18	0.82	1.02-1.12	.040-.044	1.95	.077	111.3	25.00	X	
	2	20	0.52	0.87-0.97	.034-.038	1.95	.077	66.8	15.00		X
	2	22	0.32	0.87-0.97	.034-.038	1.95	.077	53.4	12.00		X

Terminal Series No.	Hand Tool Locator	Wire Size		Conductor Crimp Height (REF)		Conductor Crimp Width (Ref)		Pull Force Minimum		Profile	
		AWG	mm ²	mm	In.	mm	In.	N	Lb.	A	B
	2	24	0.20	0.87-0.97	.034-.038	1.95	.077	35.6	8.00		X
1943	1	18	0.82	1.02-1.12	.040-.044	1.95	.077	111.3	25.00	X	
	1	20	0.52	0.87-0.97	.034-.038	1.95	.077	66.8	15.00		X
	1	22	0.32	0.87-0.97	.034-.038	1.95	.077	53.4	12.00		X
	1	24	0.20	0.87-0.97	.034-.038	1.95	.077	35.6	8.00		X
4529	1	18	0.82	1.02-1.12	.040-.044	1.95	.077	89.0	20.00	X	
	1	20	0.52	0.87-0.97	.034-.038	1.95	.077	66.8	15.00		X
	1	22	0.32	0.87-0.97	.034-.038	1.95	.077	44.5	10.00		X
	1	24	0.20	0.87-0.97	.034-.038	1.95	.077	35.6	8.00		X
5005	1	18	0.82	1.02-1.12	.040-.044	1.95	.077	98.0	22.00	X	
	1	20	0.52	0.87-0.97	.034-.038	1.95	.077	66.8	15.00		X
	1	22	0.32	0.87-0.97	.034-.038	1.95	.077	53.4	12.00		X
	1	24	0.20	0.87-0.97	.034-.038	1.95	.077	35.6	8.00		X
5006	1	18	0.82	1.02-1.12	.040-.044	1.95	.077	98.0	22.00	X	
	1	20	0.52	0.87-0.97	.034-.038	1.95	.077	66.8	15.00		X
	1	22	0.32	0.87-0.97	.034-.038	1.95	.077	53.4	12.00		X
	1	24	0.20	0.87-0.97	.034-.038	1.95	.077	35.6	8.00		X
6770	1	18	0.82	1.02-1.12	.040-.044	1.95	.077	89.0	20.00	X	
	1	20	0.52	0.87-0.97	.034-.038	1.95	.077	66.8	15.00		X
	1	22	0.32	0.87-0.97	.034-.038	1.95	.077	44.5	10.00		X
	1	24	0.20	0.87-0.97	.034-.038	1.95	.077	35.6	8.00		X
6772	1	18	0.82	1.02-1.12	.040-.044	1.95	.077	89.0	20.00	X	
	1	20	0.52	0.87-0.97	.034-.038	1.95	.077	66.8	15.00		X
	1	22	0.32	0.87-0.97	.034-.038	1.95	.077	44.5	10.00		X
	1	24	0.20	0.87-0.97	.034-.038	1.95	.077	35.6	8.00		X
7291	1	18	0.82	1.02-1.12	.040-.044	1.95	.077	89.0	20.00	X	
	1	20	0.52	0.87-0.97	.034-.038	1.95	.077	66.8	15.00		X
	1	22	0.32	0.87-0.97	.034-.038	1.95	.077	44.5	10.00		X
	1	24	0.20	0.87-0.97	.034-.038	1.95	.077	35.6	8.00		X
8662	1	18	0.82	1.02-1.12	.040-.044	1.95	.077	111.3	25.00	X	
	1	20	0.52	0.87-0.97	.034-.038	1.95	.077	66.8	15.00		X
	1	22	0.32	0.87-0.97	.034-.038	1.95	.077	44.5	10.00		X
	1	24	0.20	0.87-0.97	.034-.038	1.95	.077	31.4	7.00		X
8960	1	18	0.82	1.02-1.12	.040-.044	1.95	.077	111.3	25.00	X	
	1	20	0.52	0.87-0.97	.034-.038	1.95	.077	66.8	15.00		X
	1	22	0.32	0.87-0.97	.034-.038	1.95	.077	44.5	10.00		X
	1	24	0.20	0.87-0.97	.034-.038	1.95	.077	31.4	7.00		X

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.

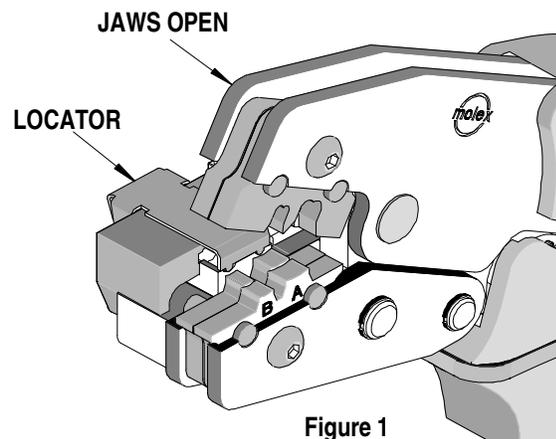


Figure 1

Crimping Terminals

1. Select the desired terminal listed in the preceding charts. Make sure that the proper locator is mounted on the tool.
2. Swing the terminal locator away from the crimp tool shown in Figure 2. 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.

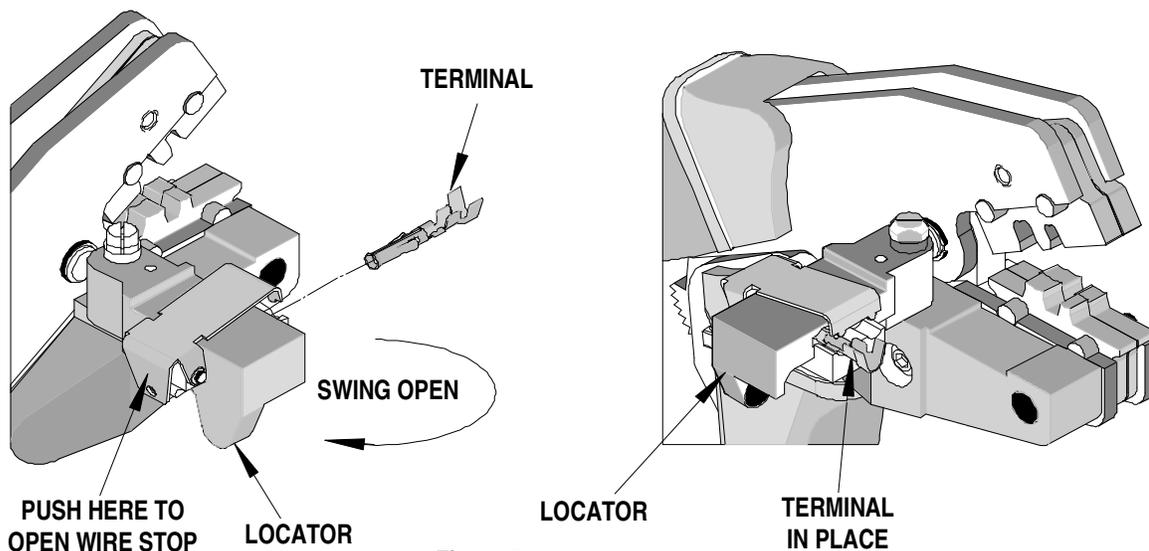


Figure 2

3. When using 63811-3275 (Locator No. 1), press down on the wire stop on the locator as shown in Figure 2. Insert the proper terminal into the proper nest opening. Make sure when choosing the nest opening, it will correspond with the A or B 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.
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 crimp 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 and crimp height.

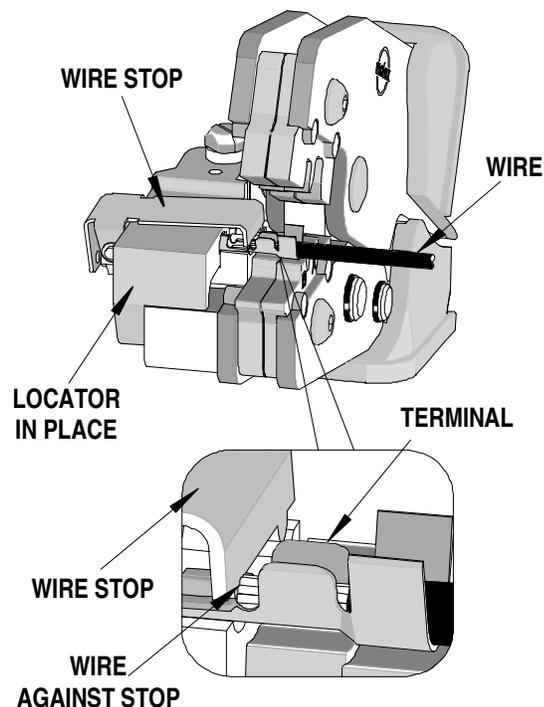


Figure 3

* Crimping Terminals without a Locator

1. With the hand tool in the open position, select the proper profile.
2. Position the terminal in the proper profile; partially close the hand tool until the terminal is held in place. The terminal should be positioned so that the front of the insulation grips is flush with the front face of the insulation tooling. See Figure 3A.
3. Gently slip the wire into the terminal, and then position the insulation and stripped strands into the terminal insulation and conductor grips. Note: No wire stop is provided. If the wire will not fit into the partially closed tool, due to large insulation diameter, the terminal and wire must then be placed in the open tool. Applying slight downward pressure on the wire may help hold the terminal in place while crimping.
4. Compress the terminal by squeezing the tool handles until the ratchet mechanism cycle has been completed. Release handles to open the jaws.

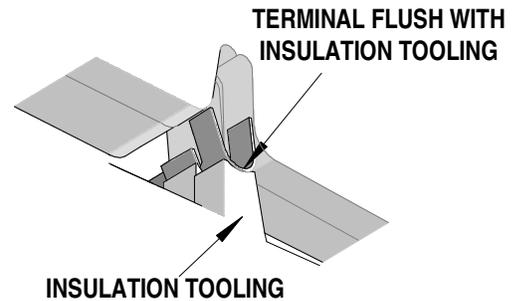


Figure 3A

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 vary slightly. An occasional, destructive, pull force test should be performed to check hand tool crimp. Pull Force value Must exceed the Minimum pull force specifications listed on pages 2 and 3.

Locator Change Over

Two styles of locators are provided with the crimp hand tool 63811-3300. They are locator no. 1 (63811-3375), which is black and locator no.2 (63811-3376), which is gray. Make sure the desired style of locator is installed for the proper terminal and wire. Follow the steps below to change the locators.

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 4.
4. Replace it with the desired locator by putting over the brass pivot shaft and snapping it into place.

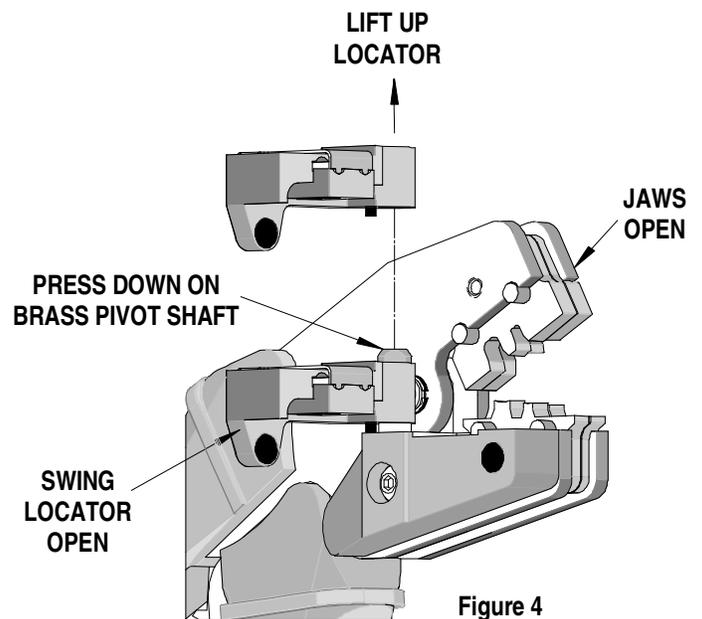


Figure 4

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 63811-3300 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. Light oil such as 30 weights automotive oil used at the oil points shown in Figure 6, 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.

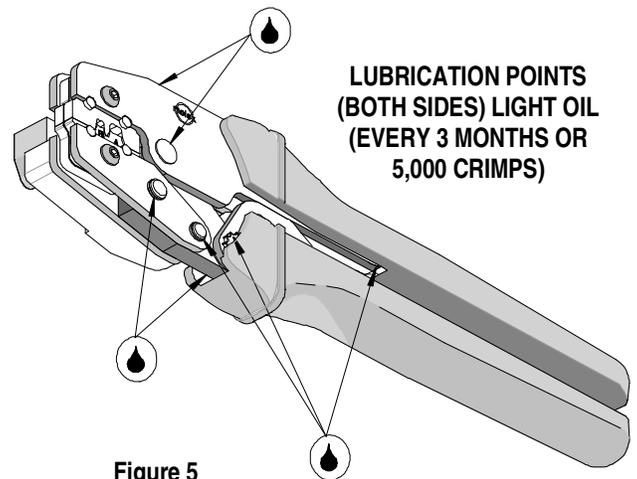


Figure 5

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 pressing the ratchet release lever (See Figure 6).

How To Adjust Tool Preload (See Figure 6)

This hand tool is factory preset to 25-45 LBS. preload. It may be necessary over the life of the tool 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 or fold back the handle grip from the handle to expose the eccentric axle counter.
2. Remove the locking screw. The wrench set (63810-0101), is not supplied. It is sold separately from the hand tool. See our website or contact your sales engineer.
3. Turning the eccentric axle counter-clockwise (CCW) will increase handle force.
4. Replace the locking screw, aligning the nearest notch in the setting wheel to locking screw.
5. Replace the handle grip.
6. Check the crimp specifications after tool handle preload force is adjusted.

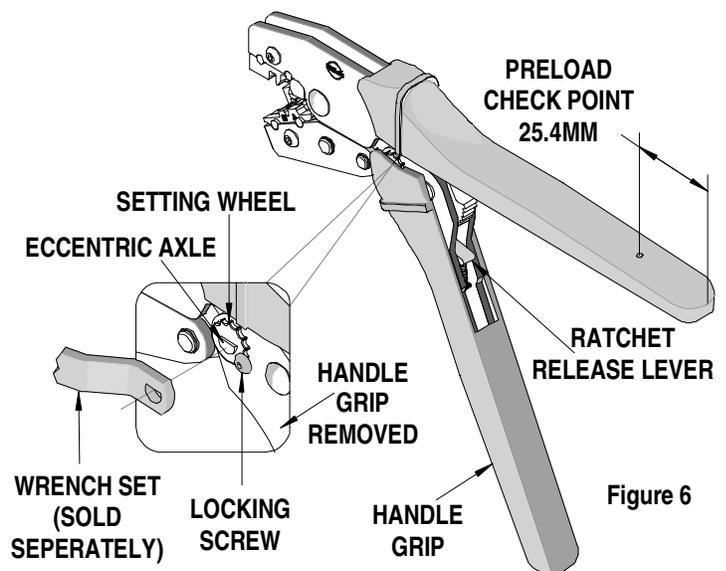


Figure 6

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, applicators 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 Molex Terminal specified for crimping with the tool.

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.
- % If the tool does not meet minimum pull force values, handle preload should be increased and the pull test rerun, (See How to Adjust Preload).
- % When the hand tool is no longer capable of achieving minimum pull force, it should be taken out of service and replaced.

PARTS LIST

Item Number	Order Number	Description	Quantity
1	63810-0101	Wrench Set (Not included)	0
2	63810-0102	Locator Base Assembly	1
3	63810-0103	Repair Kit (Not included)	0
4	63811-3375	Locator #1-Black	1
5	63811-3376	Locator #2-Gray	1

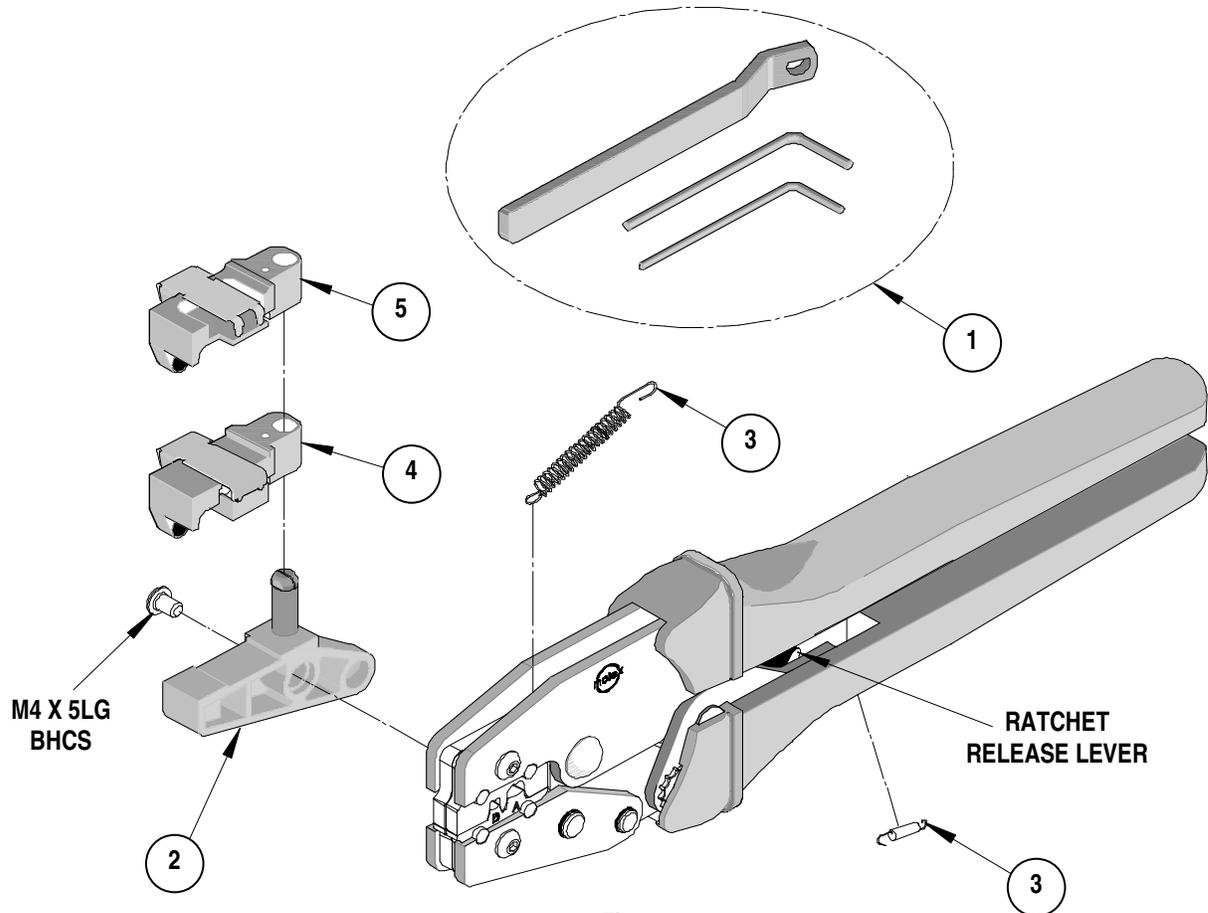


Figure 7

Americas Headquarters
 Lisle, Illinois 60532 U.S.A.
 1-800-78MOLEX
 amerinfo@molex.com

Far East North Headquarters
 Yamato, Kanagawa, Japan
 81-462-65-2324
 feninfo@molex.com

Far East South Headquarters
 Jurong, Singapore
 65-6-268-6868
 fesinfo@molex.com

European Headquarters
 Munich, Germany
 49-89-413092-0
 eurinfo@molex.com

Corporate Headquarters
 2222 Wellington Ct.
 Lisle, IL 60532 U.S.A.
 630-969-4550
 Fax: 630-969-1352

Visit our Web site at <http://www.molex.com>