

Order No. 63828-2000

## Application Tooling Specification

Type 4G

### FEATURES

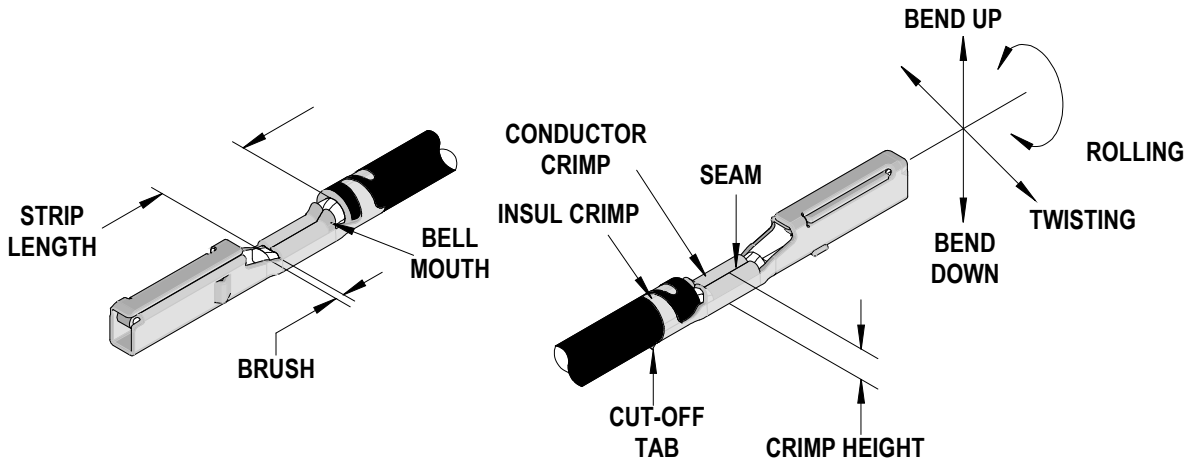
- A full cycle ratcheting hand tool ensures complete crimps
- Ergonomically designed soft handles
- Precisely designed crimping profiles with simple contact positioning
- Easy handling due to outstanding force ratio
- Selected crimping die is always centered in the tool for maximum crimp accuracy

### SCOPE

**Products:** CTX50 Unsealed Receptacle Terminals

Terminal Series No.	Terminal Order No.	Wire Type	Wire Size	Insulation Diameter		Strip Length	
		Type	mm <sup>2</sup>	mm	In.	mm (Ref.)	In. (Ref.)
560023	560023-0444	FLCUSNO3RY	0.13	0.75-1.05	.029-.041	3.6	.142
	560023-0445						
	560023-0421	CHFUS	0.22	0.95-1.20	.037-.047	2.9	.114
	560023-0423						
	560023-0448	FLR2XAZ3H FLR13Y-A A3Z	0.35	1.10-1.40	.043-.055	3.1	.122
	560023-0450						
	560023-0548						
	560023-0550						

**DEFINITION OF TERMS**



**CRIMP SPECIFICATIONS**

Terminal	Bell Mouth (Rear Only)		* Conductor Brush		Bend Up	Bend Down	Twist	Roll
	mm	In.	mm	In.	Degree (Max)		Degree (Max)	
560023-0444 560023-0445	0.12-0.32	.005-.013	0.55 Max	.021 Max	1	1	2	N/A
560023-0421 560023-0423	0.40-0.60	.016-.024	0.55 Max	.021 Max	1	1	2	N/A
560023-0448 560023-0450 560023-0548 560023-0550	0.65-0.75	.026-.030	0.55 Max	.021 Max	1	1	2	N/A

\*Brush is not to extend above the conductor crimp transition area.

After crimping, the crimp profiles must measure the following (see notes on page 5):

Terminal	Wire Size mm <sup>2</sup>	Conductor				Insulation				Pull Force Minimum N	Tool Position		
		Crimp Height		Crimp Width		Crimp Height		Crimp Width			0.13	0.35	0.22
		mm	In.	mm	In.	mm	In.	mm	In.				
560023-0444 560023-0445	0.13	0.50-0.56	.019-.022	0.80-0.86	.031-.034	1.15-1.25	.045-.049	1.05-1.15	.041-.045	50	X		
560023-0421 560023-0423	0.22	0.66-0.72	.026-.028	1.01-1.07	.040-.042	1.20-1.30	.047-.051	1.10-1.20	.043-.047	40			X
560023-0448 560023-0450 560023-0458 560023-0550	0.35	0.65-0.69	.025-.027	1.01-1.07	.040-.042	1.48-1.58	.058-.062	1.30-1.40	.051-.055	50		X	

## OPERATION

### Changing Crimp Dies

**CAUTION:** Please pay attention to these instructions.

1. Swing out the contact locator. See Figure 1.
2. Pull up on the locking bolt, and hold it in the up position. See Figure 2.
3. Move the slide to the right or the left until the desired crimp nest is identified in the window. See Figures 2 and 3.
4. Release the locking bolt and make sure it is locked into position (down).
  - **CAUTION:** Always be sure that the locator is hinged open before moving the slide to a new position.

**CAUTION:** Only crimp the Molex terminals listed above with this tool. Do not crimp hardened objects because damage can occur to the tool or die.

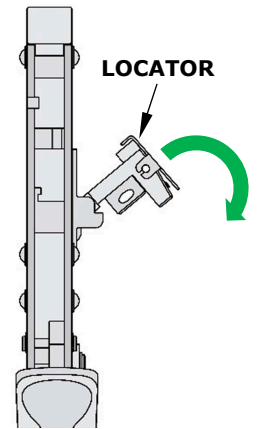


Figure 1

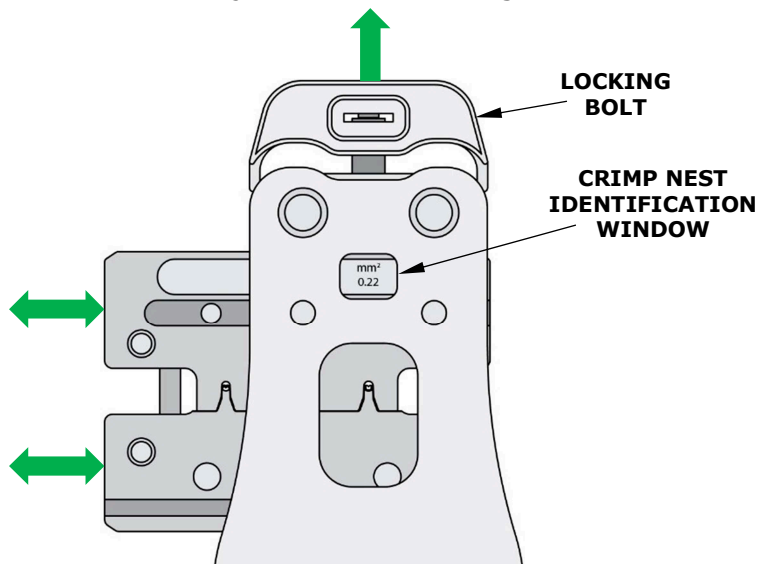


Figure 2

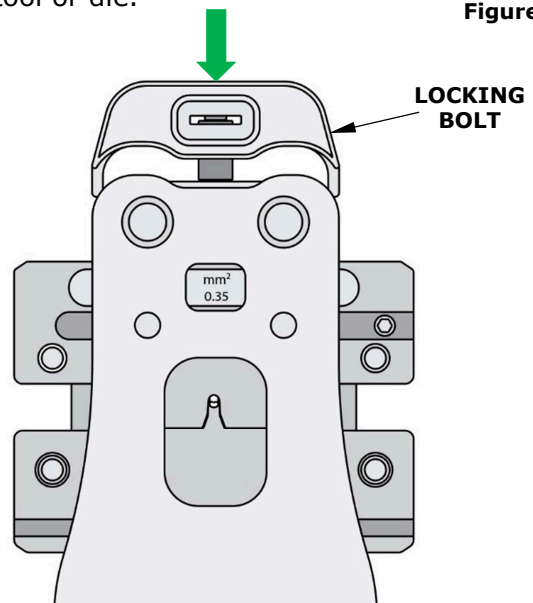


Figure 3

### Tool 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.

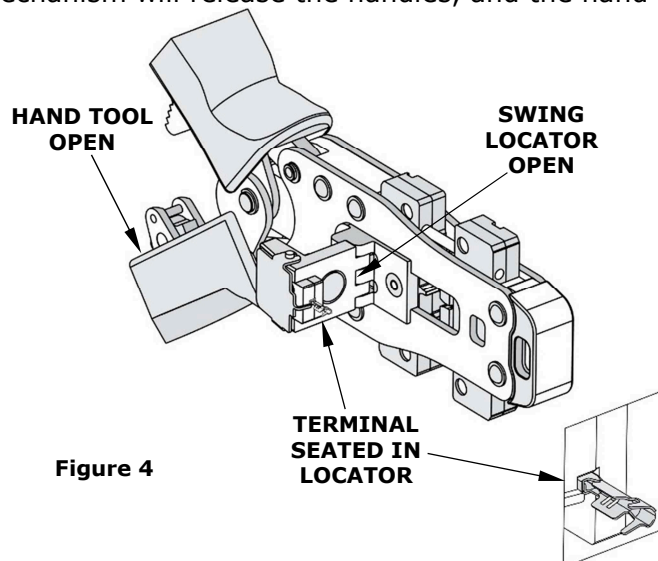


Figure 4

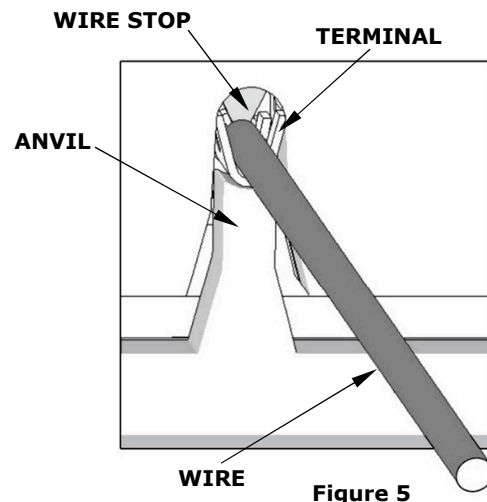


Figure 5

## Crimping Terminals

1. With the hand tool in the open position, pivot the terminal locator open by pulling up on the locator knob.
2. Push down on the wire stop release to raise the wire stop. See Figure 6. Insert the terminal into the profile until the terminal is fully seated and stops.
3. Gently pivot the locator closed.
4. Slide the pre-stripped wire into the terminal; make sure to aim the wire brush toward the tip point on the wire stop. See Figure 5. Align the wire so that it is parallel and sitting into the terminal. Maintain a light and constant pressure on the wire that is seated in the terminal at all times. (Do not let go of the wire.) Be sure to hold the wire and terminal in place until the terminal is fully crimped. See Figure 7.
5. Close the tool until the ratchet releases.
6. Push down on the wire stop release to raise the wire stop.
7. Carefully remove the crimped terminal.

**Note:** To maintain a good brush control and a consistent bell mouth, the crimping instructions must be followed.

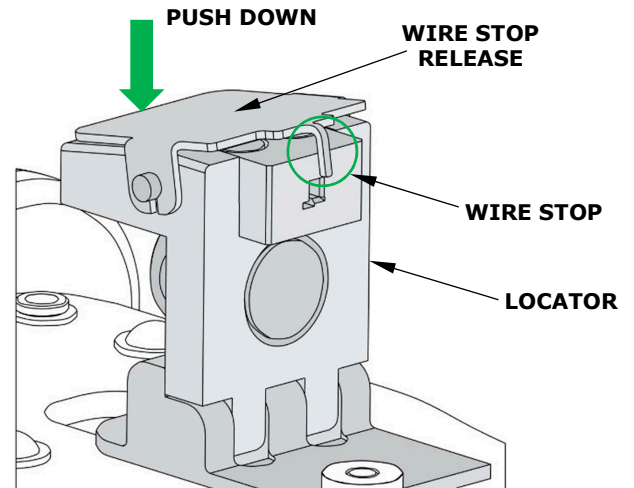


Figure 6

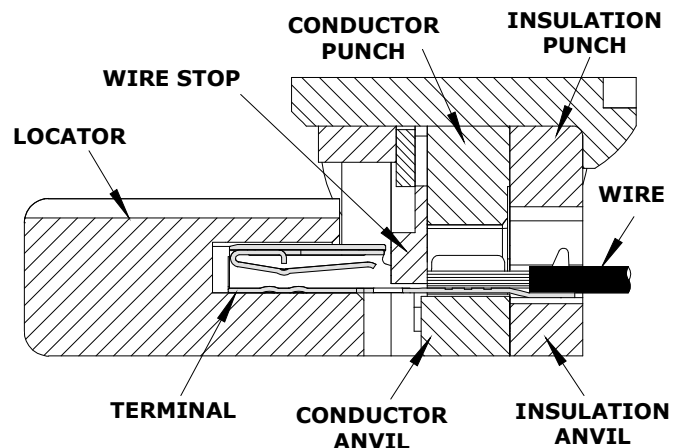


Figure 7

## 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. 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 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.

### 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 8.

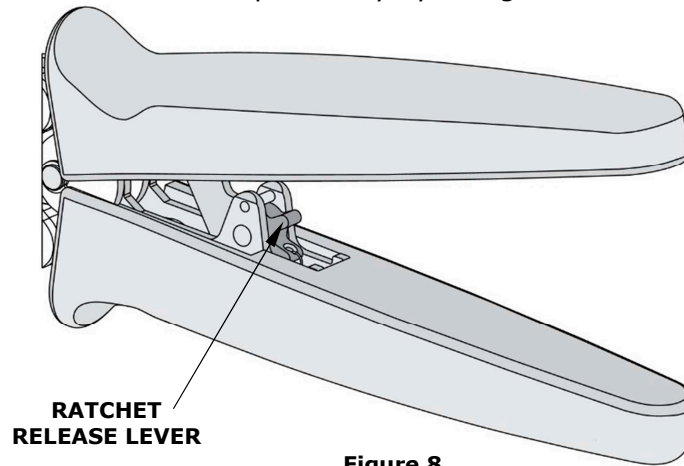


Figure 8

### 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, 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.

### CAUTIONS:

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 the Molex terminals specified for crimping with this tool.

### NOTES

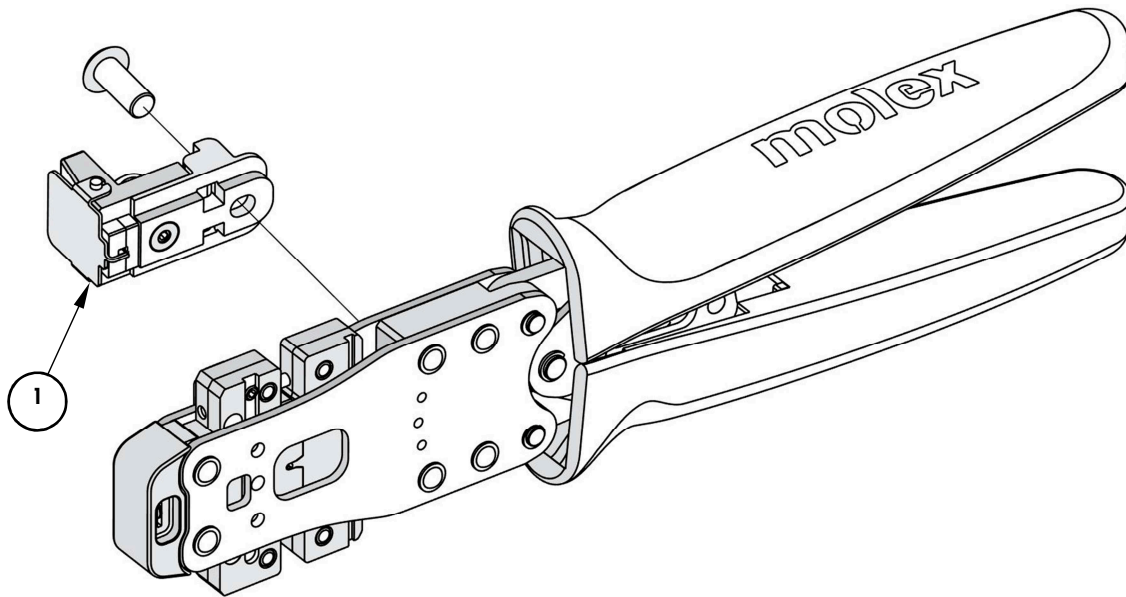
1. This tool should only be used for the terminals and wire gauges specified on this sheet.
2. This tool is not adjustable for crimp height. Variations in tools, terminals, wire stranding and insulation types may affect crimp height.
3. This tool is intended for standard conductor sizes. It may not give 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 are damaged or worn, a new tool must be purchased.
5. Pull force should be used as the final criterion for an acceptable crimp. Pull force is measured with no influence from the insulation crimp. The insulation should be stripped long (1/2 in.) so the insulation grips on the terminal do not grip the wire insulation or the conductor. Refer to Molex Quality Crimping Handbook 63800-0029 for additional information on crimping and crimp testing.
6. Molex does not certify crimp hand tools.

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

**PARTS LIST**

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Hand Crimp Tool 63828-2000			
Item	Order No.	Description	Quantity
1	63828-2075	Locator	1



**Figure 9**

**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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