

**Modular Crimp Head**  
Order No. 63825-8470

## Application Tooling Specification Sheet

**Hand Crimp Tool**  
Order No. 63825-8400

### 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
- % Modular Crimp Head is removable and can be use in the Air Powered Tool Order No.63816-0100, accompanied by Air Powered Crimp Adapter (Order No. 63816-0700).
- % Can also be used in the Battery Powered Tool Order No. 63816-0200 (110 V) or 63816-0250 (220 V) accompanied by Battery Powered Crimp Adapter (Order No. 63816-0600).

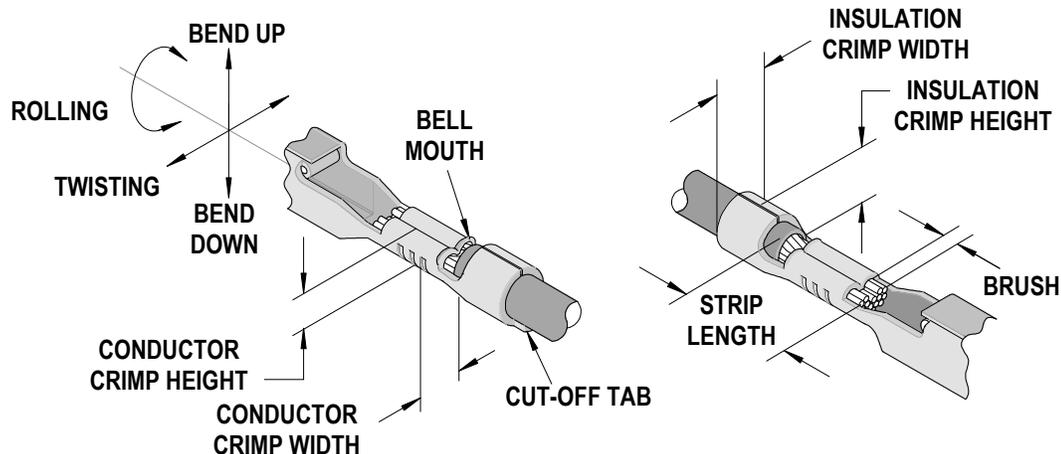
### SCOPE

Products: MX64™ ISO Terminal, 0.35mm<sup>2</sup> and 0.50-0.75mm<sup>2</sup> wire.

Terminal Series No.	Terminal Order No.		Wire Size		Insulation Diameter Maximum		Strip Length (Reference)	
			Wire Type	mm <sup>2</sup>	mm	In.	mm	In.
33467	33467-0021	33467-0022	FLR2X-A	0.35	1.30	.051	4.10	.161
33468	33468-0021	33468-0022						
34736	34736-0025	34736-0026						
33467	33467-0023	33467-0024	T3ZHID	0.50	1.60	.063	4.10	.161
33468	33468-0023	33468-0024	FLR2X-A	0.50	1.60	.063		
34736	34736-0027	34736-0028	FLR2X-A	0.75	1.80	.071		

Terminal validated per USCAR-21 with the following wire specifications:  
ISO 6722, GMW15626 and Ford ES-AU5T-1A348-AA, PSA B25 1110:NTS-Conventional Electrical Conductor.

### DEFINITION OF TERMS



### CRIMP SPECIFICATION

Terminal Series No.	Bell mouth		* Cut-off Tab Maximum		▶ Conductor Brush Maximum	
	mm	In.	mm	In.	mm	In.
33467	0.25-0.45	.010-.018	See note	See note	0.55	.022
33468						
34736						
▶ Wire brush must be flush or below top of Conductor Crimp.						
*Customer to cut off terminal from reel: 0.50mm (.020") maximum Cut-off Tab (No burrs allowed)						

Terminal Series No.	Bend up	Bend down	Twist	Roll	Seam
33467	3 Degree Max				Seam shall not be open and no wire allowed out of the crimping area
33468					
34736					

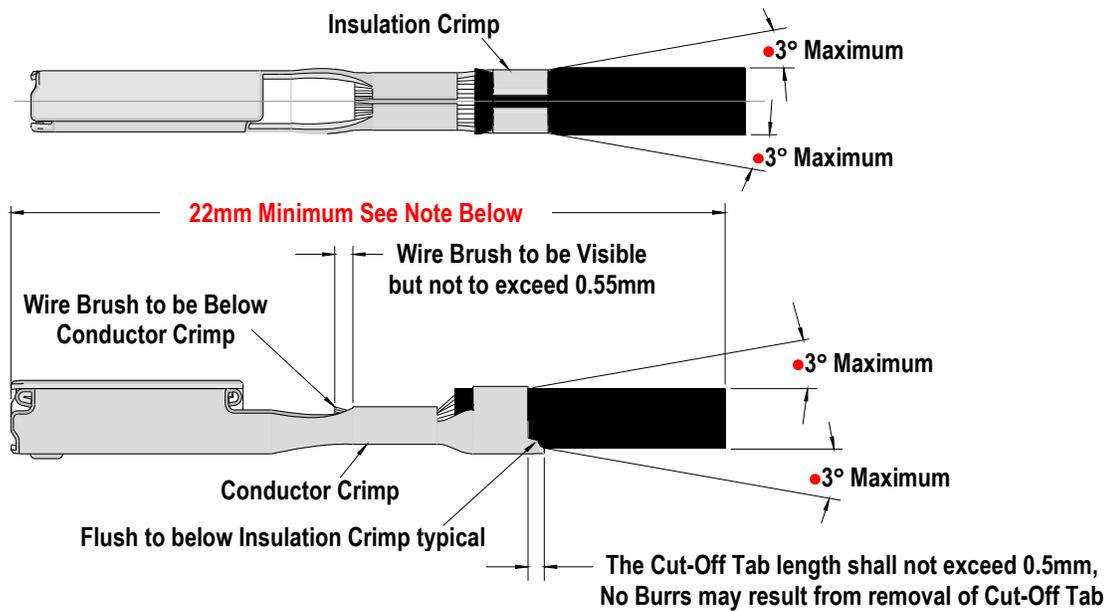
After crimping, the conductor profile should measure the following.

Terminal Order No.		Wire Size		Conductor				Profile
				Crimp Height		Crimp Width		
		Wire Type	mm <sup>2</sup>	mm	In.	mm	In.	
33467-0021	33467-0022	FLR2X-A	0.35	0.93-0.99	.037-.039	1.35-1.45	.053-.057	A
33468-0021	33468-0022							
34736-0025	34736-0026							
33467-0023	33467-0024	T3ZHID	0.50	0.95-1.03	.037-.041	1.75-1.85	.069-.073	B
33468-0023	33468-0024	FLR2X-A	0.50	0.95-1.03	.037-.041	1.75-1.85	.069-.073	
34736-0027	34736-0028	FLR2X-A	0.75	1.03-1.13	.041-.045	1.75-1.85	.069-.073	

Terminal Order No.		Wire Size		Insulation				Pull Force Minimum	
				Crimp Height		Crimp Width			
		Wire Type	mm <sup>2</sup>	mm	In.	mm	In.	N	Lb.
33467-0021	33467-0022	FLR2X-A	0.35	1.45-1.65	.057-.065	1.64-1.84	.065-.072	50	11.3
33468-0021	33468-0022								
34736-0025	34736-0026								
33467-0023	33467-0023	T3ZHID	0.50	1.80-2.00	.071-.079	1.79-1.99	.070-.078	75	16.9
33468-0023	33468-0023	FLR2X-A	0.50	1.80-2.00	.071-.079	1.79-1.99	.070-.078	75	16.9
34736-0027	34736-0027	FLR2X-A	0.75	2.00-2.20	.079-.087	1.83-2.03	.072-.080	90	20.3

**Tool Qualification Notes:**

1. Pull Force should be measured with no influence from the insulation crimp.
2. The above specifications are guidelines to an optimum crimp.



**NOTE:**

• Straightness:

- A Crimped terminal lead must be straight within 22mm in length as shown.
- B Wire on the crimped lead must meet all specification above.

**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.

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

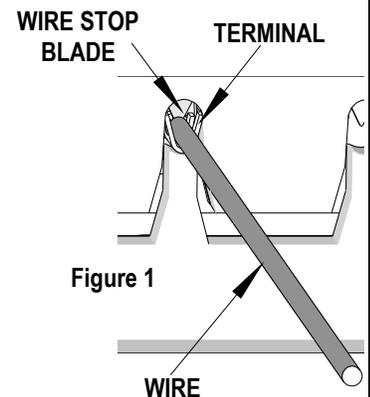


Figure 1

**Crimping Terminals**

1. With the hand tool in the open position lift the wire stop up and place the terminal into the correct die profile until the terminal stopped by the locator.
2. Bring down the wire stop blade; make sure the wire stop blade is fully seated on the terminal behind the conductor grip section.
3. Slide the pre-stripped wire into the terminal; make sure to aim the wire brush towards the tip point on the wire stop blade. See Figure 1. 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 2.
4. Close the tool until the ratchet releases.
5. Lift the wire stop blade up.
6. Carefully remove the crimped terminal.
7. Inspect the crimped terminal for an acceptable crimp.

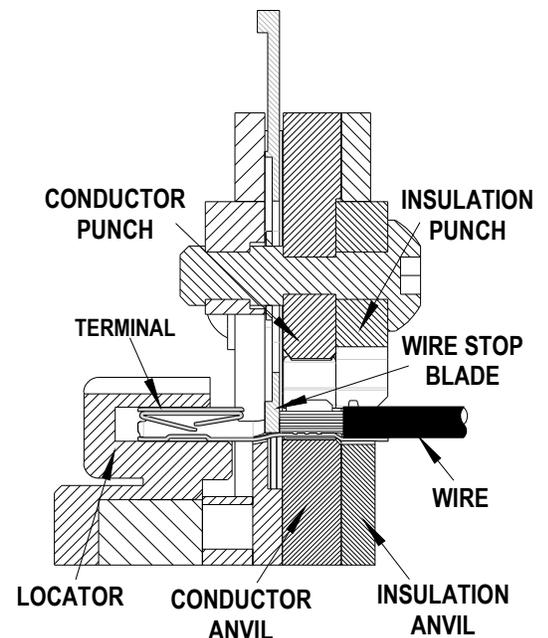


Figure 2

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

## 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

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

## 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.

## Notes:

1. This tool should only be used for the terminals and wire gauges specified on this sheet.
2. 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. 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.

- Molex does not certify crimp hand tools.

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

### Applications for the Modular Crimp Head

**WARNING:** NEVER operate, service, install, or adjust this Modular Crimp Head without proper instruction and without first reading and understanding the instructions in the proper Manual or Specification Sheet. See Chart below for the correct Manual or Specification Sheet.

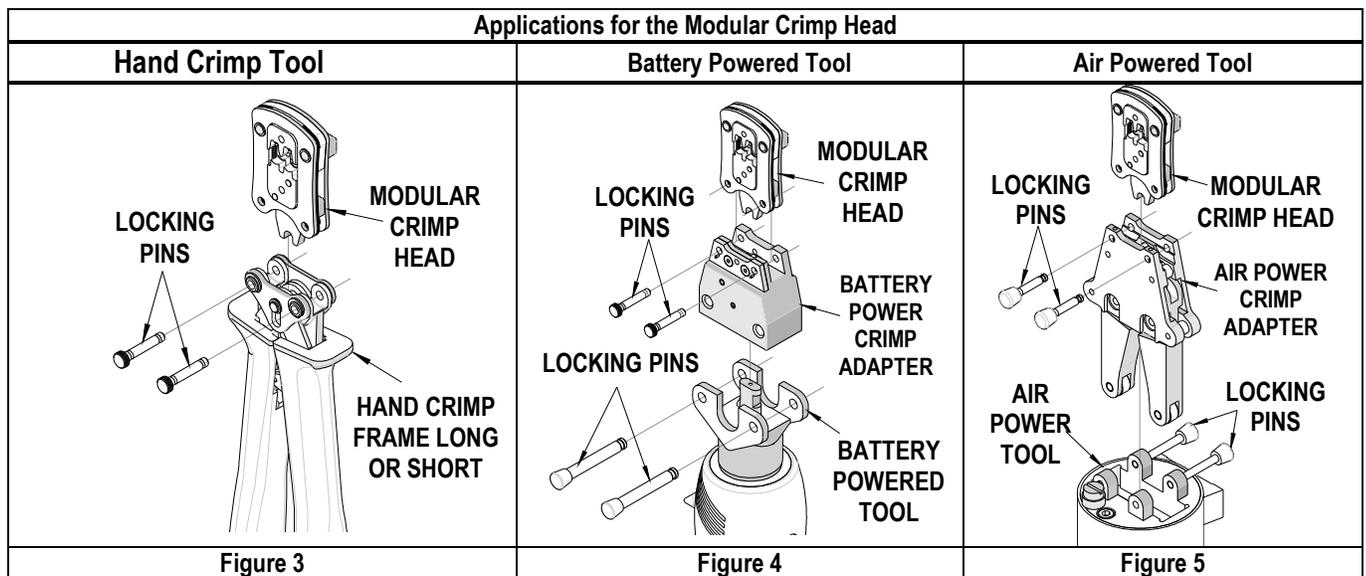
**WARNING:** NEVER install tooling or service this tool while it is into any power source. Disconnect the power by unplugging or turn off the Actuator from its power source.

**CAUTION:** Keep fingers away from the crimping area when operating this tool. It may cause severe injury.

**CAUTION:** Wear safety glasses when operating or serving this tool.

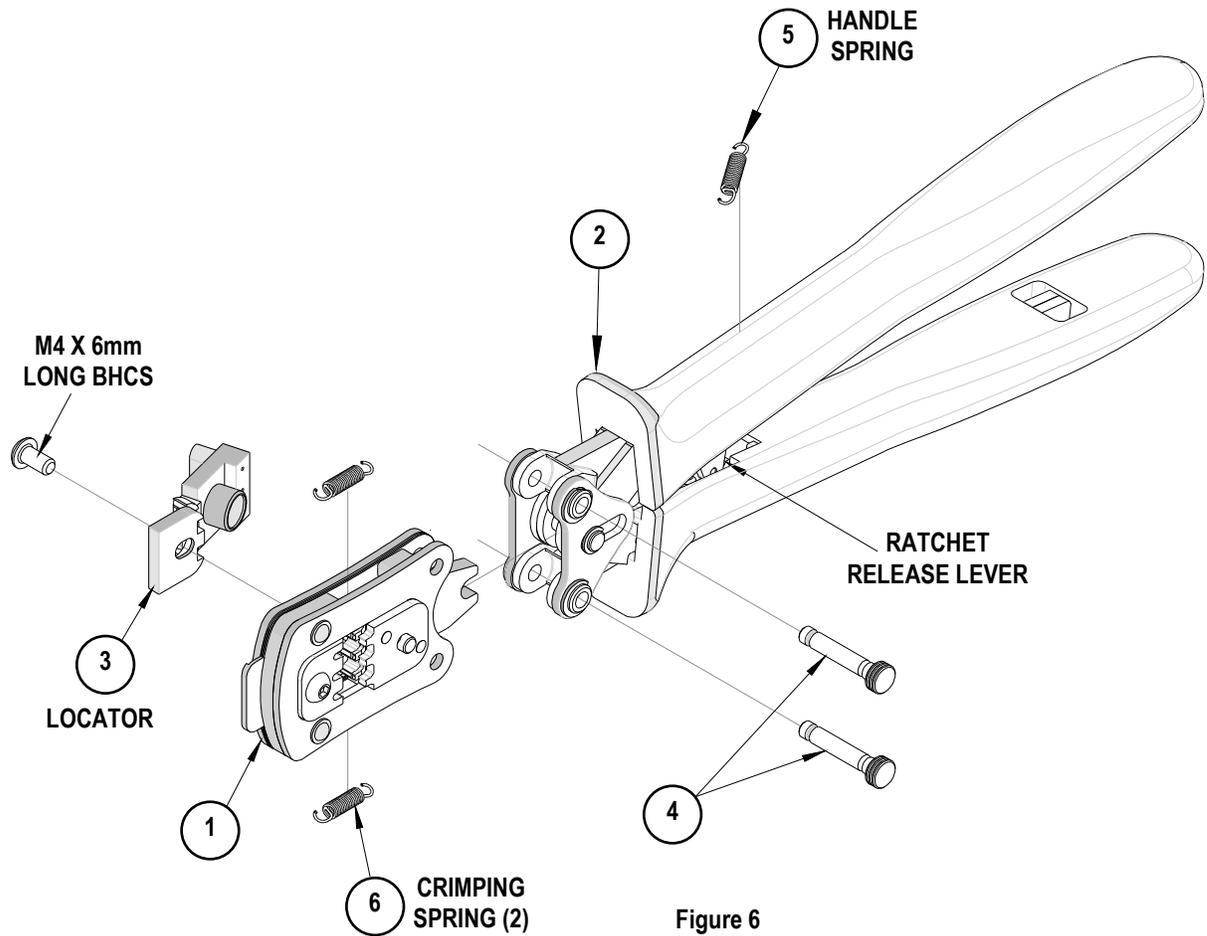
The chart below shows all applications for this Modular Crimp Head.

Modular Crimp Head Order No.	Tool Order no.	Tool Description	Adapter Order No.	Adapter Description	Figure No.
63823-8470	63816-0000	Hand Crimp Frame (Short)	N/A	N/A	3
	63816-0050	Hand Crimp Frame (Long)	N/A	N/A	3
	63816-0200	Battery Power Tool (110 V)	63816-0600	Battery Power Crimp Adapter	4
	63816-0250	Battery Power Tool (220 V)	63816-0600	Battery Power Crimp Adapter	4
	63816-0100	Air Power Tool	63816-0700	Air Power Crimp Adapter	5



## PARTS LIST

Hand Crimp Tool 63825-8400			
Item	Order Number	Description	Quantity
1	63825-8470	Modular Crimp Head	1
2	63816-0050	Hand Crimp Frame (Long)	1
3	63825-8475	Locator	1
4	63816-0001	Locking Pin	2
5	63600-0525	Handle Spring	1
6	63600-0520	Crimping Spring	2



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