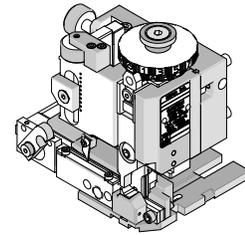


**Mini-Mac  
Applicator**



**Application Tooling  
Specification Sheet**



**Order No. 63893-4200**

**FEATURES**

- Directly adapts to most automatic wire processing machines
- Applicator designed to industry standard mounting and shut height 135.80mm (5.346")
- Quick set-up time; plus the crimp height, track and feed adjustments can be set without removing the applicator from the press
- Fine adjustment allows users to achieve target with little effort by adjusting in increments of .015mm (.0006") for barrel crimp height and .063mm (.0025") for insulation height. See notes on Page 2.
- Independent adjustment rings allow users to quickly adjust the barrel or insulation crimp height without affecting each other.

**SCOPE**

Products: Board-In Crimp Terminal Male, 16-18 AWG.

Terminal Series No.	Terminal Order No.	Wire Size		Insulation Diameter Maximum		Strip Length	
		AWG	mm <sup>2</sup>	mm	In.	mm	In.
4706	02-09-2105	16-18	1.30-0.80	3.05	.120	5.97-6.35	.235-.250

**DEFINITION OF TERMS**

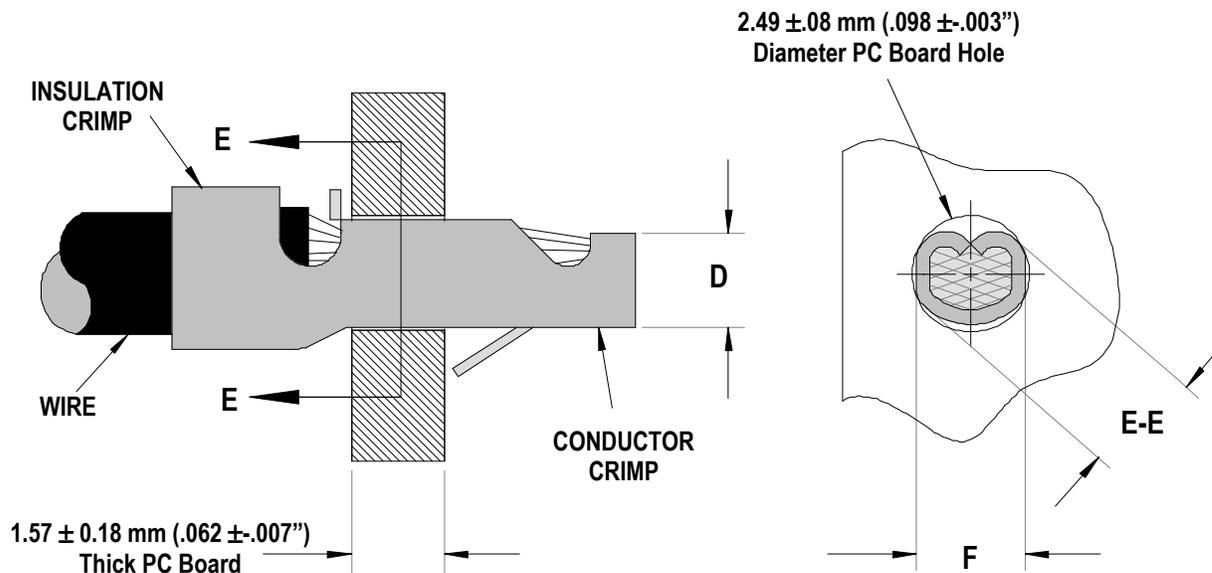


Figure 1

Section E-E

## CRIMP SPECIFICATIONS

After crimping, the conductor profiles should measure the following (See Figure 1).

Terminal Series No.	Wire Size		Dimensions (Figure 1)						Pull Force Minimum	
			D (Conductor)		E-E (Barrel)		F (Ref.)			
	AWG	mm <sup>2</sup>	mm	In.	mm	In.	mm	In.	N	Lb.
4706	16	1.30	1.22-1.27	.048-.050	2.29-2.39	.090-.094	1.93-1.98	.076-.078	13.34	3.0
	18	0.80	1.22-1.27	.048-.050	2.16-2.26	.085-.089	1.93-1.98	.076-.078	13.34	3.0

\*The crimp on this terminal is not an electrical crimp; the final soldering operation is the electrical connection. This minimum force is what should be expected when pulling the terminal with both insulation and conductor crimped.

### Notes:

1. The Conductor crimp (D dimension on Figure 1) should be set at the maximum height to contain all wire strands, meet minimum pull, and fit into the PCB Hole. The insulation and barrel crimps are adjustable, by the cams (rings) on top of the Mini-Mac ram. The conductor crimp height is not adjustable. Shimming may be required of the conductor punch to optimize this for different wire types.
2. To achieve the reference "D" dimension listed in the chart above, a shim is required. These shims are not supplied with the applicator. The shim should be located between the ram and the conductor punch. See Figure 2.

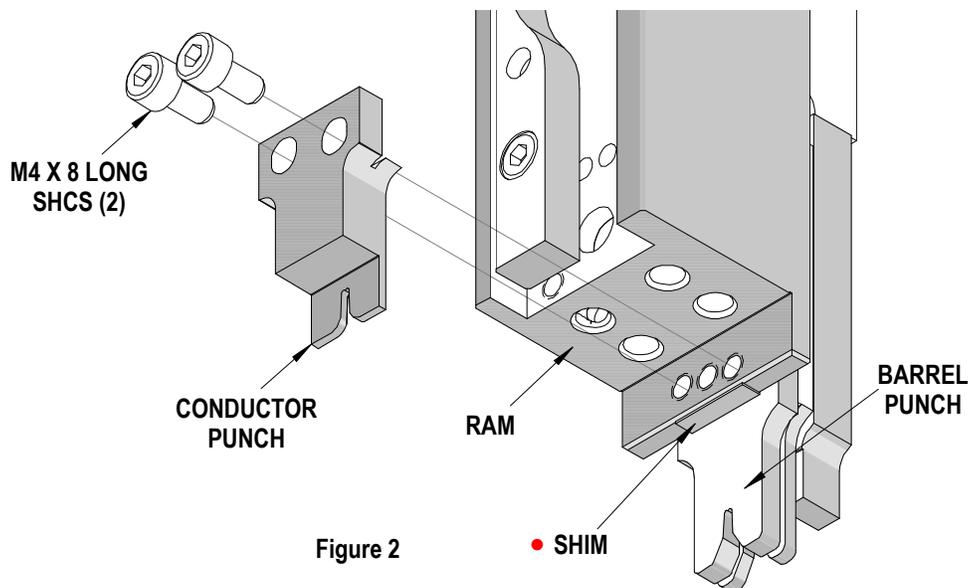


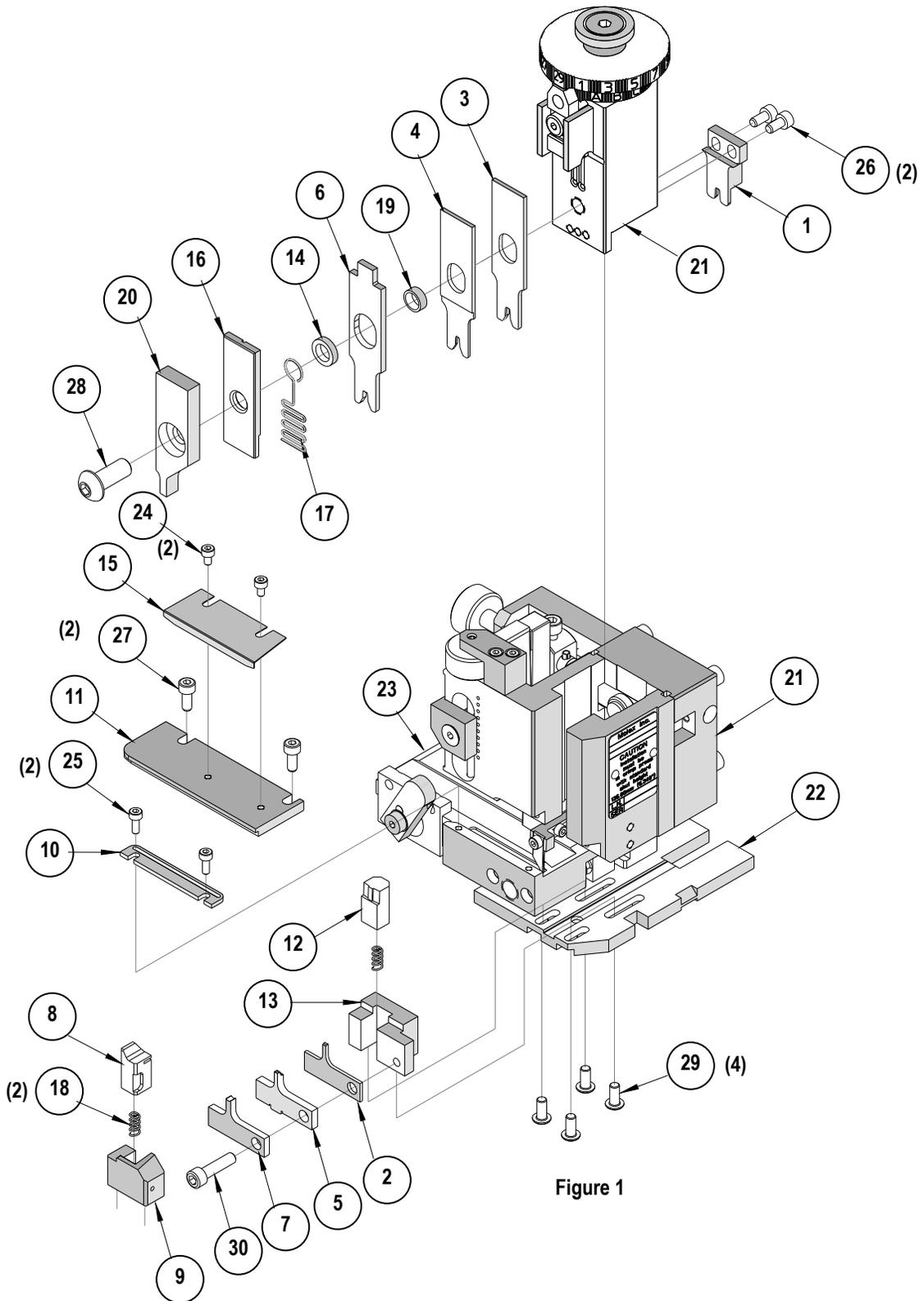
Figure 2

• Shim location for Conductor Punch.

**PARTS LIST**

<b>Mini-Mac Applicator 63893-4200</b>				
<b>Item</b>	<b>Order No</b>	<b>Engineering No.</b>	<b>Description</b>	<b>Quantity</b>
<b>Perishable Tooling</b>				
	63893-4270	63893-4270	Tool Kit (All "Y" Items)	REF
1	11-18-4216	60714-12	Conductor Punch	1 Y
2	11-18-4210	60714-6	Conductor Anvil	1 Y
3	11-18-4214	60714-10	Rear Barrel Punch	1 Y
4	11-18-4215	60714-11	Front Barrel Punch	1 Y
5	11-18-4211	60714-7	Barrel Form Anvil	1 Y
6	63893-4201	63893-4201	Insulation Punch	1 Y
7	63893-4202	63893-4202	Insulation Anvil	1 Y
8	63893-4204	63893-4204	Front Cut-Off Plunger	1 Y
9	11-18-4176	60718-15	Front Plunger Guide Block	1 Y
<b>Other Components</b>				
10	11-18-4083	60707-8	Feed Guide	1
11	11-18-4206	60714-2	Cover Plate	1
12	11-18-4207	60714-3	Wire Stop	1
13	11-18-4208	60714-4	Rear Plunger Retainer	1
14	11-18-4209	60714-5	Insulation Punch Spacer	1
15	11-18-4789	60714B113	Terminal Guide	1
16	11-18-4848	60800A123	Spring Retainer	1
17	11-18-4849	60800A124	Wire Hold-Down Spring	1
18	11-18-4944	60710-21	Cut-off Plunger Spring	2
19	63803-5109	63803-5109	Conductor Bushing	1
20	63893-4203	63893-4203	Plunger Striker	1
<b>Frame</b>				
21	63801-3201	63801-3201	Top	1
22	63801-3282	63801-3282	Base	1
23	63801-6550	63801-6550	Track	1
<b>Hardware</b>				
24	N/A	N/A	M3 by 5 Long SHCS	2**
25	N/A	N/A	M3 by 8 Long SHCS	2**
26	N/A	N/A	M4 by 8 Long SHCS	2**
27	N/A	N/A	M4 by 10 Long SHCS	2**
28	N/A	N/A	M8 by 20 Long BHCS	1**
29	N/A	N/A	#8-32 by 3/8" Long BHCS	4**
30	N/A	N/A	#10-32 by 3/4" Long SHCS	1**
** Available from an industrial supply company such as MSC (1-800-645-7270).				

### Assembly Drawing



## NOTES

1. Molex recommends an extra perishable tooling kit be maintained at your facility.
2. Verify tooling alignment by manually cycling the press and applicator before crimping under power. Check that all screws are tight.
3. Slugs, terminals, dirt, and oil should be kept clear of work area.
4. Wear safety glasses at all times.
5. For recommended maintenance refer to the Mini-Mac Manual.

**CAUTION:** This applicator should only be used in a press with a shut height of 135.80 mm (5.346"). Tooling damage could result at a lower setting

**CAUTION:** To prevent injury, never operate this applicator without the guards supplied with the press or wire-processing machine in place. Reference the press or wire processing manufacturer's instruction manual.

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

## Contact Information

For more information on Molex application tooling please contact Molex at 1-800-786-6539.

<http://www.molex.com>

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