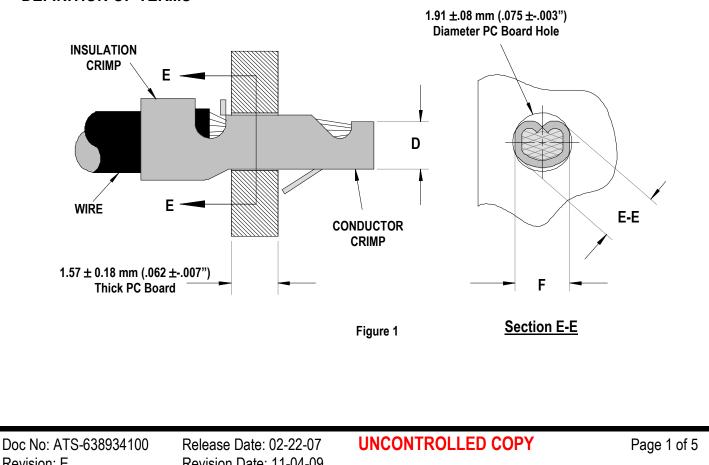


Independent adjustment rings allow users to guickly adjust the barrel or insulation crimp height without affecting each other.

### SCOPE

Products: Board-In Crimp Terminal Male, 18-24 AWG.

Terminal Series No.	Terminal Order No.		Wire Size		Insulation Diameter Maximum		Strip Length	
			AWG	mm²	mm	In.	mm	ln.
4706	02-07-2101	50-29-1688	18-24	0.80-0.20	3.05	.120	5.97-6.35	.235250



## **DEFINITION OF TERMS**

Revision: E

Revision Date: 11-04-09

## **CRIMP SPECIFICATIONS**

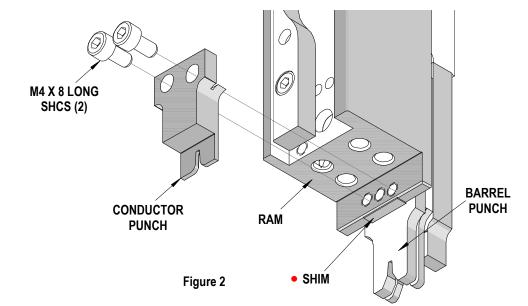
	Wire Size		Dimensions (Figure 1)						Pull Force Min.	
Terminal Series No.			D (Ref.)(Conductor)		E-E (Barrel)		F (Ref.)			
	AWG	mm <sup>2</sup>	mm	ln.	mm	In.	mm	ln.	N	Lb.
4706	18	0.80	1.12	.044	1.72-1.78	.068070	.055	1.40	13.34	3.0
	20	0.50	1.12	.044	1.72-1.78	.068070	.055	1.40	13.34	3.0
	<b>T</b> 22	0.35	0.97	.038	1.72-1.78	.068070	.055	1.40	13.34	3.0
	<b>T</b> 24	0.20	0.97	.038	1.72-1.78	.068070	.055	1.40	13.34	3.0
T For 22 and 24 AWG See Note 2.										

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

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 in 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 (.38mm) .015" thick 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.

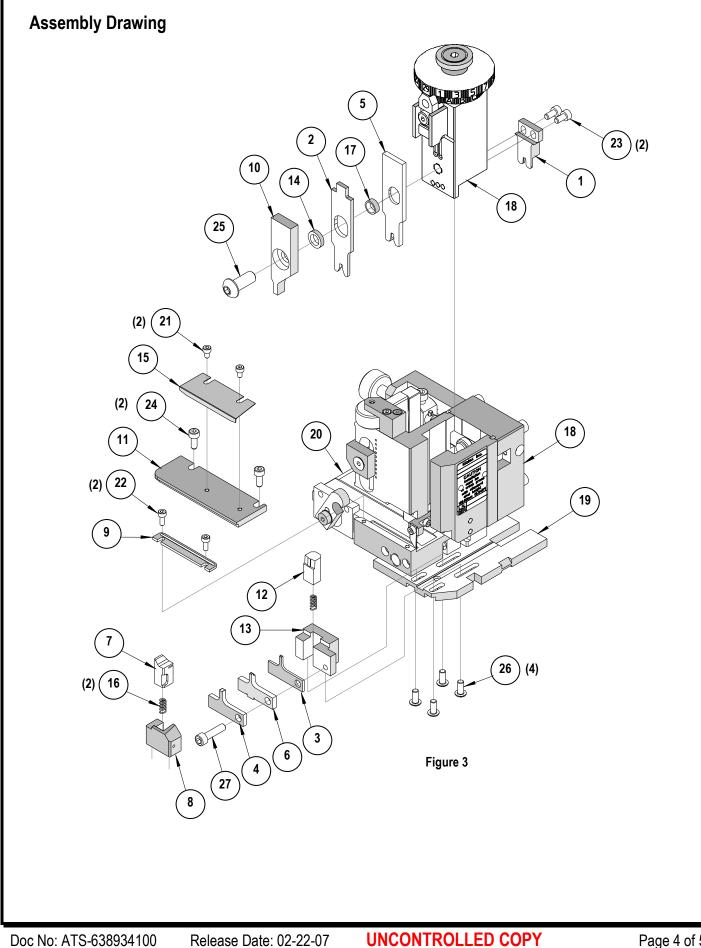


• Shim location for Conductor Punch. Shim size should be .38 by 3.2 by 12.7mm (.015 by 1/8 by 1/2").

Release Date: 02-22-07 Revision Date: 11-04-09 **UNCONTROLLED COPY** 

# PARTS LIST

Mini-Mac Applicator 63893-4100								
Item	Order No	Engineering No.	Description	Quantity				
Perishable Tooling								
	63893-4170	63893-4170	Tool Kit (All "Y" Items)	REF				
1	11-18-4220	60714-16	Conductor Punch	1 Y				
2	11-18-4213	60714-9	Insulation Punch	1 Y				
3	11-18-4787	60714B104	Conductor Anvil	1 Y				
4	11-18-4212	60714-8	Insulation Anvil	1 Y				
5	11-18-4219	60714-15	Barrel Form Punch	1 Y				
6	11-18-4788	60714B109	Barrel Form Anvil	1 Y				
7	63893-4105	63893-4105	Front Cut-off Plunger	1 Y				
8	11-18-4176	60718-15	Front Plunger Guide Block	1 Y				
		Other Componer	nts (REF 934150)					
9	11-18-4083	60707-8	Feed Guide	1				
10	11-18-4167	60718-6	Plunger Striker	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	11-18-4944	60710-21	Cut-off Plunger Spring	2				
17	63803-5109	63803-5109	Conductor Bushing	1				
Frame								
18	63801-3201	63801-3201	Тор	1				
19	63801-3282	63801-3282	Base	1				
20	63801-6550	63801-6550	Track	1				
Hardware								
21	N/A	N/A	M3 by 5 Long SHCS	2**				
22	N/A	N/A	M3 by 8 Long SHCS	2**				
23	N/A	N/A	M4 by 8 Long SHCS	2**				
24	N/A	N/A	M4 by 10 Long SHCS	2**				
25	N/A	N/A	M8 by 20 Long BHCS	1**				
26	N/A	N/A	#8-32 by 3/8" Long BHCS	4**				
27	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).								



Revision Date: 11-04-09

## 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.

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

Doc No: ATS-638934100 Revision: E

Release Date: 02-22-07 Revision Date: 11-04-09 UNCONTROLLED COPY