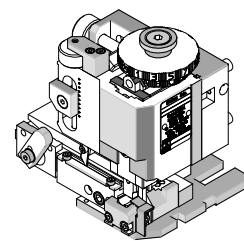




**FineAdjust  
Applicator**

**Application Tooling  
Specification Sheet**



**Order No. 63900-4300**

**FEATURES**

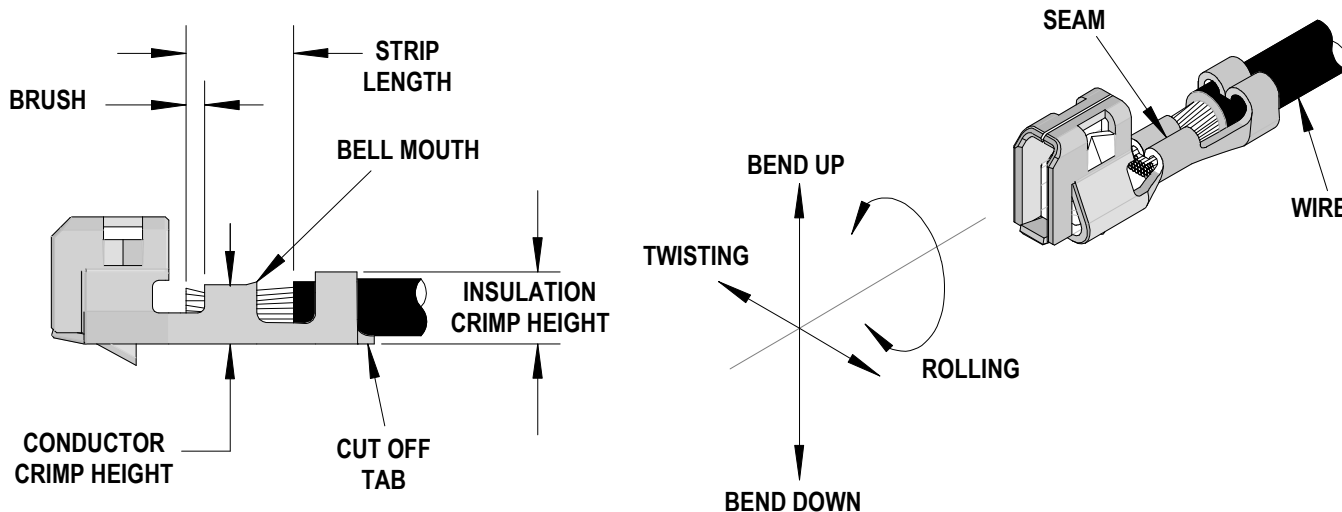
- Directly adapts to most automatic wire processing machines
- Quick punch removal with the push of a button for fast and easy tooling change
- Applicator designed to industry standard mounting and shut height 135.80mm (5.346")
- Quick set-up time; plus the crimp height, track and feed adjustments can 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 conductor crimp height and .063mm (.0025") for insulation height
- Independent adjustment rings allow users to quickly adjust the conductor or insulation crimp height without affecting each other

**SCOPE**

Products: 1.25mm (.049") Pico-Gold™ Crimp Terminal, 28-32 AWG.

Terminal Series No.	Terminal Order No.		Wire Size		Insulation Diameter		Strip Length	
			AWG	mm <sup>2</sup>	mm	In.	mm	In.
50516	50516-8031	50516-8099	28-32	0.08-0.03	0.50-1.00	.020-.039	1.40-1.90	.047-.067
	50516-8041							

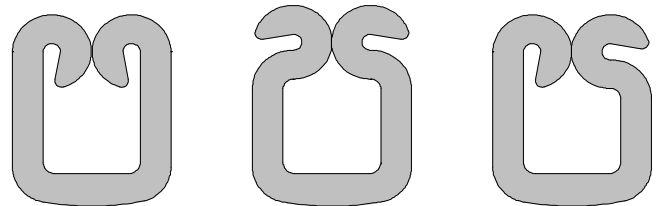
**DEFINITION OF TERMS**



The above terminal drawing is a generic terminal representation. It is not an image of a terminal listed in the scope.

### INSULATION CRIMP FORM

This crimp terminal is designed for miniaturization; therefore, each dimension of insulation crimp portion appears small as compared to the terminal material thickness. In order to avoid insulation piercing the crimp forms by the insulation barrel, coining is provided inside of the insulation barrel. For this reason, various crimp forms will occur at the tip of the insulation crimp barrel shown in the figure below.



These crimp forms maybe changed completely by a small change in the wire, insulation punch, or terminal.

These crimp forms are satisfactory for original function of the insulation crimp portion and it is confirmed that all of these forms below are acceptable insulation crimps.

### CRIMP SPECIFICATION

Terminal Series No.	Bell mouth		Cut-off Tab Maximum		Conductor Brush	
	mm	In.	mm	In.	mm	In.
50516	0.05-0.30	.002-.012	0.15	.006	0.00-0.40	.000-.016

Terminal Series No.	Bend up	Bend down	Twist	Roll	Punch Width mm (Ref)				Seam  Seam shall not be open and no wire allowed out of the crimping area
	Degree				Degree		Conductor		
	mm	In	mm	In	mm	In	mm	In	
50516	4	4	3	8	0.80	.031	0.80	.031	

After crimping, the conductor profile should measure the following.

Terminal Series No.	Wire Size		Conductor Crimp Height		Pull Force Minimum	
	AWG	mm <sup>2</sup>	mm	In.	N	Lb.
50516	28	0.08	0.54-0.59	.021-.023	9.78	2.20
	30	0.05	0.52-0.57	.020-.022	4.89	1.10
	32	0.03	0.50-0.55	.019-.021	2.94	0.66

#### 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.

**PARTS LIST**

<b>FineAdjust Applicator 63900-4300</b>				
<b>Item</b>	<b>Order No</b>	<b>Engineering No.</b>	<b>Description</b>	<b>Quantity</b>
<b>Perishable Tooling</b>				
	63900-4370	63900-4370	Tool Kit (All "Y" Items)	REF
1	63444-0802	63444-0802	Conductor Punch	1 Y
2	63445-0810	63445-0810	Conductor Anvil	1 Y
3	63446-0808	63446-0808	Insulation Punch	1Y
4	63445-0806	63445-0806	Insulation Anvil	1 Y
5	63443-0005	63443-0005	Cut-Off Plunger	1 Y
6	63443-0012	63443-0012	Front Plunger Retainer	1 Y
<b>Other Components</b>				
7	11-18-4083	60707-8	Feed Guide	1
8	11-24-1067	4996-4	Cut-Off Plunger Spring	1
9	63443-0009	63443-0009	Front Scrap Chute	1
10	63443-0024	63443-0024	Key	1
11	63443-0090	63443-0090	Wire Stop	1
12	63443-1703	63443-1703	Height Spacer (17.30mm)	1
13	63443-2217	63443-2217	Coarse Spacer (17.00mm)	1
14	63443-2306	63443-2306	Fine Spacer (3.30mm)	1
15	63443-2802	63443-2802	Front Plunger Striker	1
16	63443-2908	63443-2908	Wire Hold Down Plunger	1
17	63443-6111	63443-6111	Rear Cover	1
18	63600-0021	63600-0021	Compression Spring	1
<b>Frame</b>				
19	63800-4901	63800-4901	Top	1
20	63801-3281	63801-3281	Base	1
21	63801-4650	63801-4650	Track	1
<b>Hardware</b>				
22	N/A	N/A	M3 by 6 Long SHCS	2**
23	N/A	N/A	M3 by 6 Long FHCS	1**
24	N/A	N/A	M4 by 6 Long SHCS	2**
25	N/A	N/A	M4 by 12 Long BHCS	2**
26	N/A	N/A	M4 by 45 Long SHCS	2**
27	N/A	N/A	M5 by 12 Long SHCS	1**
28	N/A	N/A	#10-32 by 3/8" Long Flat Point SSS	1**
29	N/A	N/A	#10-32 Hex Jam Nut	1**
** Available from an industrial supply company such as MSC (1-800-645-7270).				

### Assembly Drawing

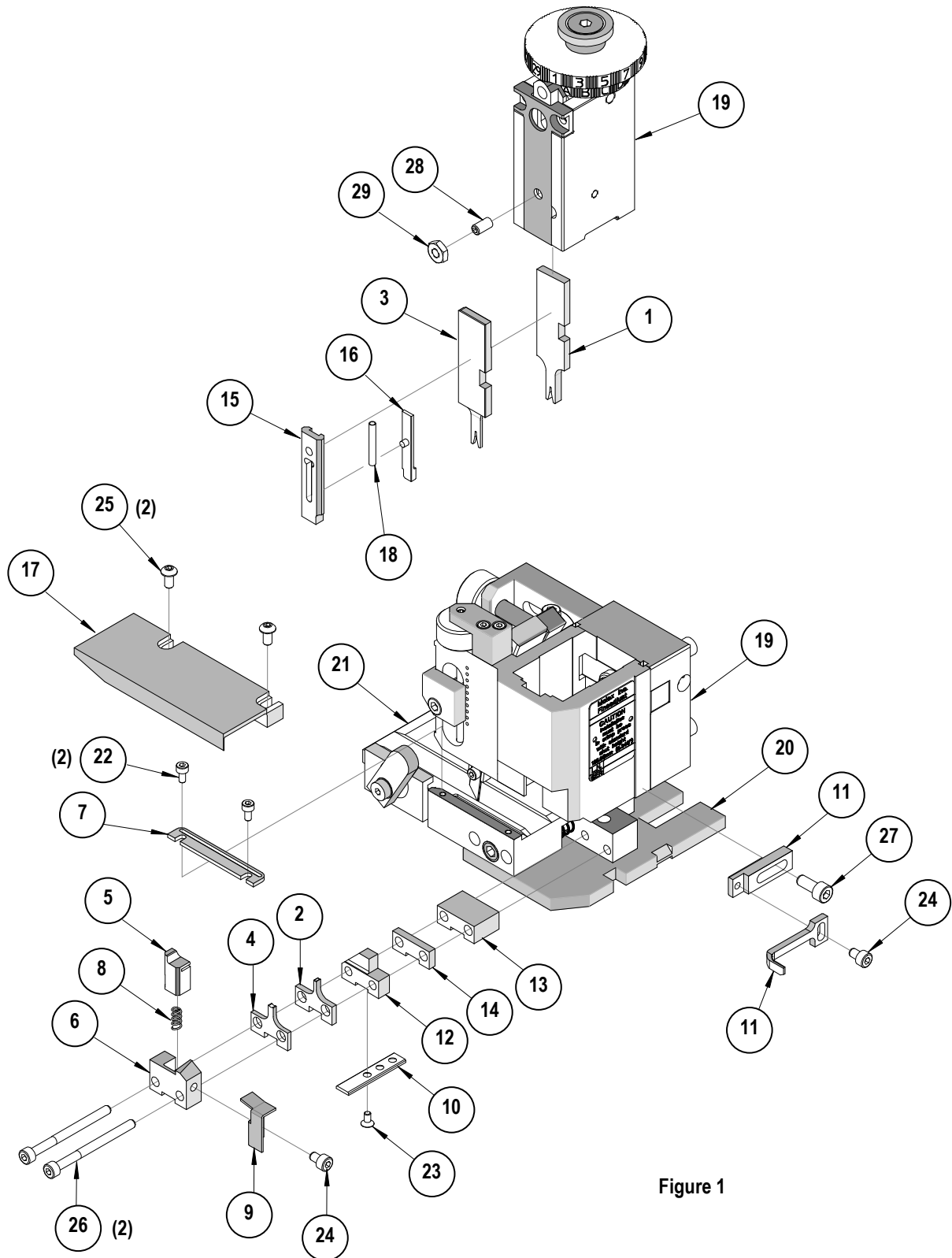


Figure 1

## 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 FineAdjust 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.

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