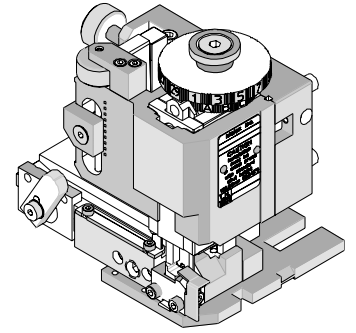




# FineAdjust Applicator Specification Sheet Order No. 63900-4200



## FEATURES

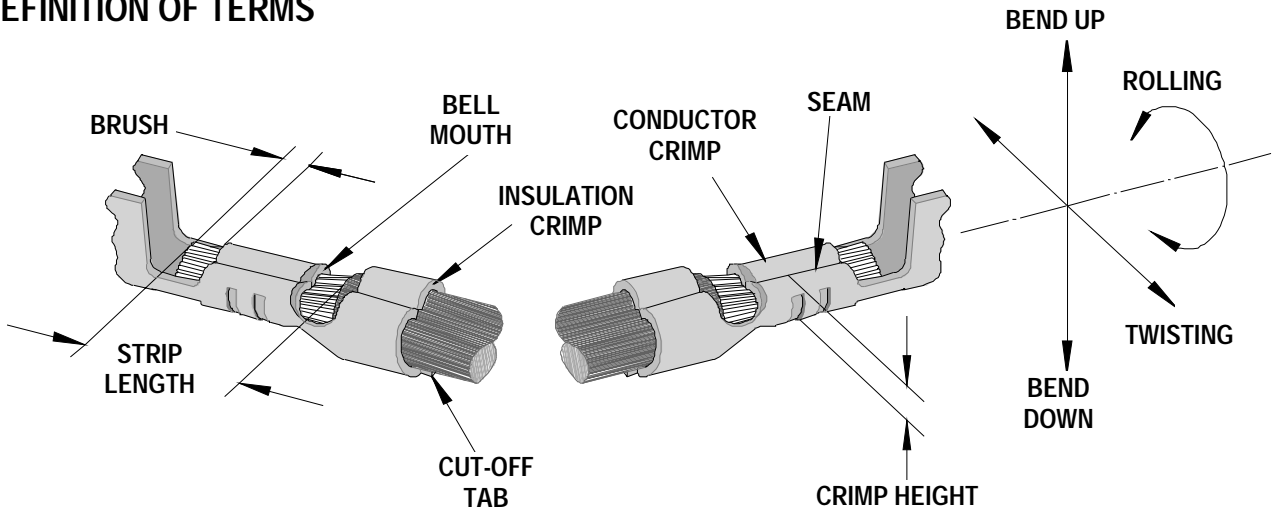
- Directly adapts to most automatic wire processing machines
- Quick punch removal with the push of a button for fast and easy tooling change
- Applicator designed to industry standard mounting and shut height 135.80mm (5.346")
- Quick set-up time; plus the crimp height, track and feed adjustments can 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") Pitch Board-In, Wire-to-Board, and Wire-to-Wire Crimp Terminal, 26-32 AWG.

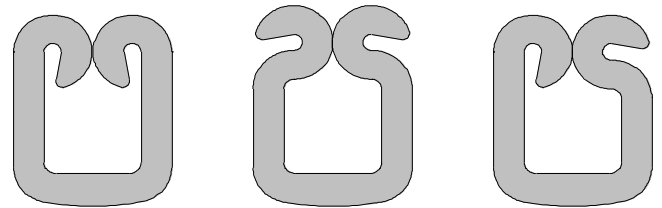
Terminal Series No.	Terminal Order No.		Wire Size		Insulation Diameter		Strip Length	
			AWG	mm <sup>2</sup>	mm	In.	mm	In.
50061	50061-8000	50061-8028	28-32	0.08-0.03	0.50-1.00	.020-.039	1.40-1.90	.055-.075
	50061-8018	50061-8099						
50080	50080-8000		26-28	0.12-0.08	0.50-1.00	.020-.039	1.40-1.90	.055-.075
50125	50125-8000		26-28	0.12-0.08	0.50-1.00	.020-.039	1.40-1.90	.055-.075
50133	50133-8000		28-32	0.08-0.03	0.50-1.00	.020-.039	1.40-1.90	.055-.075

## 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.
50061	None	None	0.15	.006	0.00-0.70	.000-.028
50080	None	None	0.15	.006	0.00-0.70	.000-.028
50125	None	None	0.15	.006	0.00-0.70	.000-.028
50133	None	None	0.15	.006	0.00-0.70	.000-.028

Terminal Series No.	Bend up Bend down		Twist Roll		Punch Width mm (Ref)				Seam
	Degree		Degree		Conductor		Insulation		
	mm	In.	mm	In.	mm	In.	mm	In.	
50061	8	0	4	13	0.80	.031	0.80	.031	Seam shall not be open and no wire allowed out of the crimping area
50080	8	0	4	13	0.80	.031	0.80	.031	
50125	2-8	0	4	10	0.80	.031	0.80	.031	
50133	2-8	0	4	10	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.
50061	28	0.08	0.48-0.54	.019-.021	9.78	2.20
	30	0.05	0.47-0.52	.018-.020	4.89	1.10
	32	0.03	0.44-0.49	.017-.019	2.94	0.66
50080	26	0.12	0.59-0.64	.023-.025	9.78	2.20
	28	0.08	0.55-0.60	.022-.024	9.78	2.20
50125	26	0.12	0.59-0.64	.023-.025	9.78	2.20
	28	0.08	0.55-0.60	.022-.024	9.78	2.20
50133	28	0.08	0.48-0.54	.019-.021	9.78	2.20
	30	0.05	0.47-0.52	.018-.020	4.89	1.10
	32	0.03	0.44-0.49	.017-.019	2.94	0.66

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

**PARTS LIST**

<b>FineAdjust Applicator 63900-4200</b>				
<b>Item</b>	<b>Order No</b>	<b>Engineering No.</b>	<b>Description</b>	<b>Quantity</b>
<b>Perishable Tooling</b>				
	63900-4270	63900-4270	Tool Kit (All "Y" Items)	REF
1	63444-0802	63444-0802	Conductor Punch	1 Y
2	63445-0806	63445-0806	Conductor Anvil	1 Y
3	63446-0805	63446-0805	Insulation Punch	1Y
4	63445-0805	63445-0805	Insulation Anvil	1 Y
5	63443-0003	63443-0003	Cut-Off Plunger	1 Y
6	63443-0012	63443-0012	Front Plunger Retainer	1 Y
<b>Other Components (REF 003750)</b>				
7	11-18-4083	60707-8	Feed Guide	1
8	11-24-1067	4996-4	Cut-Off Plunger Spring	1
9	11-40-4039	8302-5	Plunger Striker	1
10	63443-0009	63443-0009	Front Scrap Chute	1
11	63443-0024	63443-0024	Key	1
12	63443-0090	63443-0090	Wire Stop	1
13	63443-1703	63443-1703	17.30mm Height Spacer	1
14	63443-2217	63443-2217	17.00mm Coarse Spacer	1
15	63443-2306	63443-2306	3.30mm Fine Spacer	1
16	63443-6111	63443-6111	Rear Cover	1
<b>Frame</b>				
17	63800-4901	63800-4901	Top	1
18	63801-3281	63801-3281	Base	1
19	63801-4650	63801-4650	Track	1
<b>Hardware</b>				
20	N/A	N/A	M3 by 6 Long SHCS	2**
21	N/A	N/A	M3 by 6 Long FHCS	1**
22	N/A	N/A	M4 by 6 Long SHCS	2**
23	N/A	N/A	M4 by 12 Long BHCS	2**
24	N/A	N/A	M4 by 45 Long SHCS	2**
25	N/A	N/A	M5 by 12 Long SHCS	1**
26	N/A	N/A	#10-32 by 3/8" Long Flat Point SSS	1**
27	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

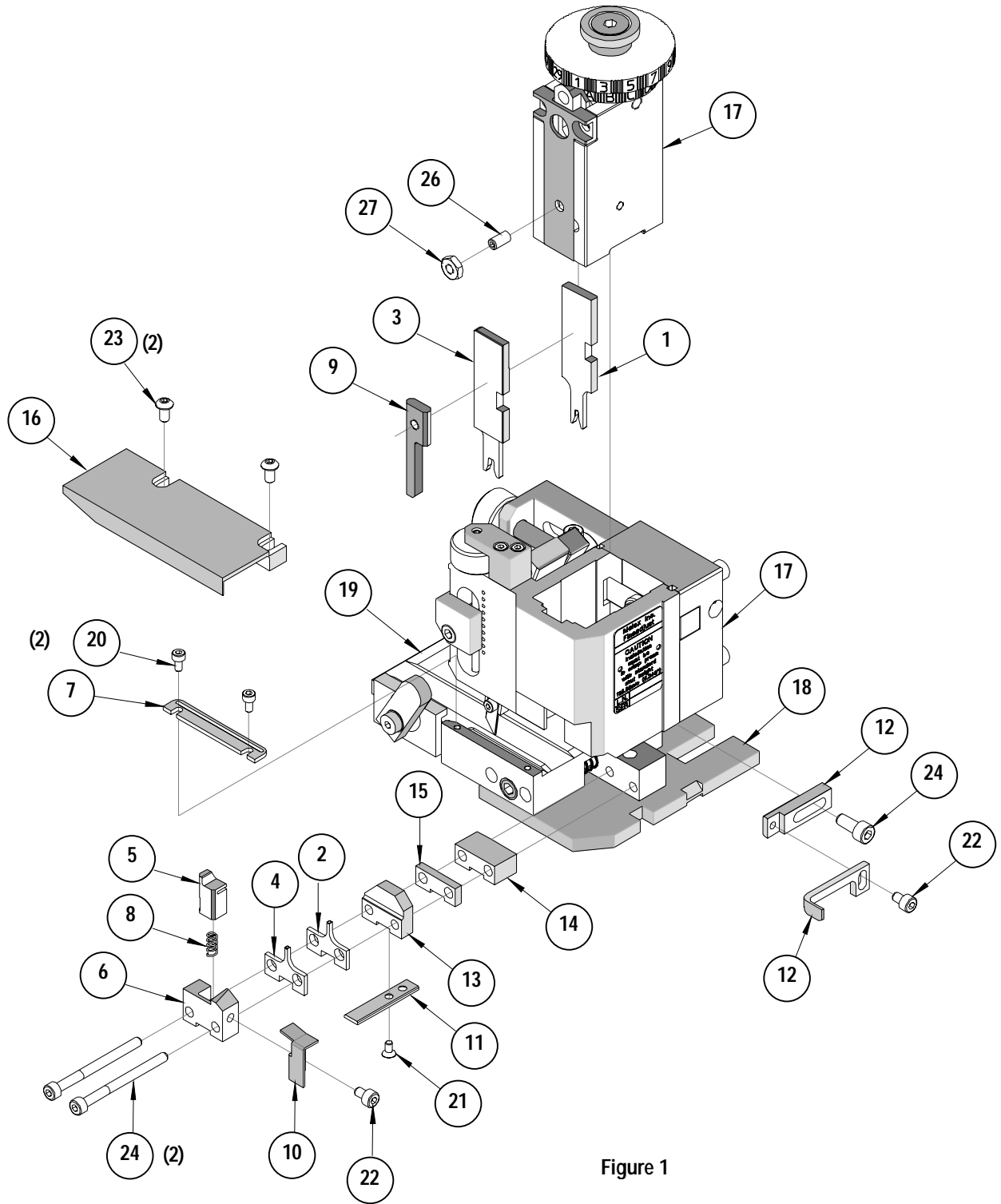


Figure 1

## 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.

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