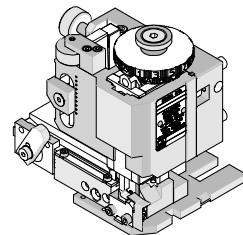


FineAdjust  
ApplicatorApplication Tooling  
Specification Sheet

Order No. 63902-5000

## 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

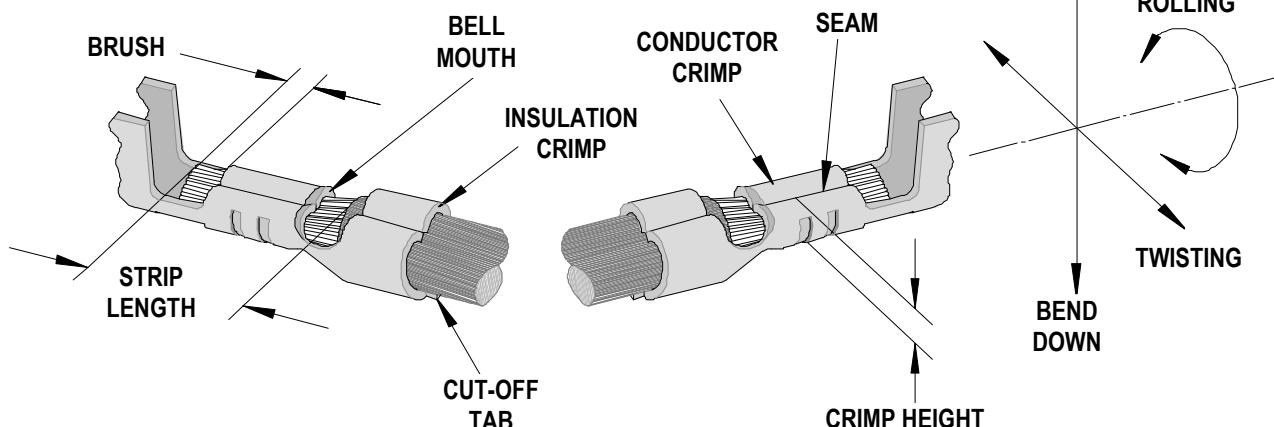
Products: 1.50mm (.059") Pitch CLIK-Mate™ Wire-to-Board Crimp Terminals, 24-28 AWG and 0.2 and 0.08mm.

Terminal Series No.	Terminal Order No.	Wire Size			Insulation Diameter				Strip Length	
		AWG	mm <sup>2</sup>	Stranding	IPC/WHMA-A620 (1)	mm	In.	Terminal (2)		
502579	502579-0000	24	--	7 x 32 AWG	0.90 - 1.2	0.035 - 0.047	0.8 - 1.2	.031-.047	1.50 - 1.90	.059 - .075
		26	--	7 x 34 AWG	0.90 - 1.2	0.035 - 0.047	0.8 - 1.2	.031-.047		
	502579-1000	28	--	7 x 36 AWG	0.90 - 1.2	0.035 - 0.047	0.8 - 1.2	.031-.047		
		--	0.2	7 x 0.18mm	0.90 - 1.2	0.035 - 0.047	0.8 - 1.2	.031-.047		
		--	0.08	--	0.90 - 1.2	0.035 - 0.047	0.8 - 1.2	.031-.047		

(1) To achieve optimum IPC-A620 insulation crimps, use this insulation OD range.

(2) Overall insulation OD specification for terminal.

## DEFINITION OF TERMS



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

**CRIMP SPECIFICATION**

Terminal Series No.	Bell mouth		Cut-off Tab Maximum		Conductor Brush	
	mm	In.	mm	In.	mm	In.
502579	0.10-0.40	.004 -.016	0.10	.004	0.10 - 0.60	.004 -.024

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	
	Conductor	Insulation								
	Degree (Max)	Degree (Max)	mm	In.	mm	In.				
502579	3	3	3	8	1.00	.039	1.10	.043		

After crimping, the conductor profile should measure the following.

Terminal Series No.	Wire Size		Conductor Crimp				Pull Force Minimum	
			Crimp Height		Crimp Width (Ref.)			
	AWG	mm <sup>2</sup>	mm	In.	mm	In.	N	Lb.
502579	24	--	0.60-0.65	.024-.026	1.00	0.039	29.4	6.61
	26	--	0.59-0.64	.023-.025	1.00	0.039	19.6	4.41
	★ 28	--	0.56-0.61	.022-.024	1.00	0.039	9.8	2.20
	--	0.2	0.60-0.65	.024-.026	1.00	0.039	29.4	6.61
	--	★ 0.08	0.56-0.61	.022-.024	1.00	0.039	9.8	2.20

★ Note: To achieve optimum pull force a conductor crimp height of 0.54-0.59mm is recommended for 28awg (0.08mm) wire.  
This will allow a minimum Cpk value of 1.67.  
This lower crimp height range produces a mechanically sound crimp. However, electrical performance may vary.

Terminal Series No.	Wire Size		Insulation				
			Crimp Height (Maximum)		Crimp Width (Ref.)		
	AWG	mm <sup>2</sup>	mm	In.	mm	In.	
502579	24	--	1.65	.065	1.10	0.043	
	26	--	1.55	.061	1.10	0.043	
	28	--	1.45	.057	1.10	0.043	
	---	0.2	1.65	.057	1.10	0.043	
	---	0.08	1.35	.053	1.10	0.043	

■ 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**

FineAdjust Applicator 63902-5000				
Item	Order No	Engineering No.	Description	Quantity
<b>Perishable Tooling</b>				
	63902-5070	63902-5070	Tool Kit (All "Y" Items)	REF
1	63444-1007	63444-1007	Conductor Punch	1 Y
2	63445-1009	63445-1009	Conductor Anvil	1 Y
3	63446-1107	63446-1107	Insulation Punch	1 Y
4	63445-1106	63445-1106	Insulation Anvil	1 Y
5	63443-0005	63443-0005	Front 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	63443-1720	63443-1720	Height Spacer	1
13	63443-2201	63443-2201	Coarse Spacer (1.00mm)	1
14	63443-2216	63443-2216	Coarse Spacer (16.00mm)	1
15	63443-2304	63443-2304	Fine Spacer (3.20mm)	1
16	63443-2805	63443-2805	Front Plunger Striker	1
17	63443-2904	63443-2904	Wire Hold Down Plunger	1
18	63443-6111	63443-6111	Rear Cover	1
19	63600-0021	63600-0021	Wire Hold Down Spring	1
<b>Frame</b>				
20	63800-4901	63800-4901	Top	1
21	63801-3281	63801-3281	Base	1
22	63801-4650	63801-4650	Track	1
<b>Hardware</b>				
23	N/A	N/A	M3 by 6 Long SHCS	2**
24	N/A	N/A	M3 by 6 Long FHCS	1**
25	N/A	N/A	M4 by 6 Long SHCS	2**
26	N/A	N/A	M4 by 12 Long BHCS	2**
27	N/A	N/A	M4 by 50 Long SHCS	2**
28	N/A	N/A	M5 by 12 Long SHCS	1**
29	N/A	N/A	#10-32 by 3/8"Long Flat Point SSS	1**
30	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

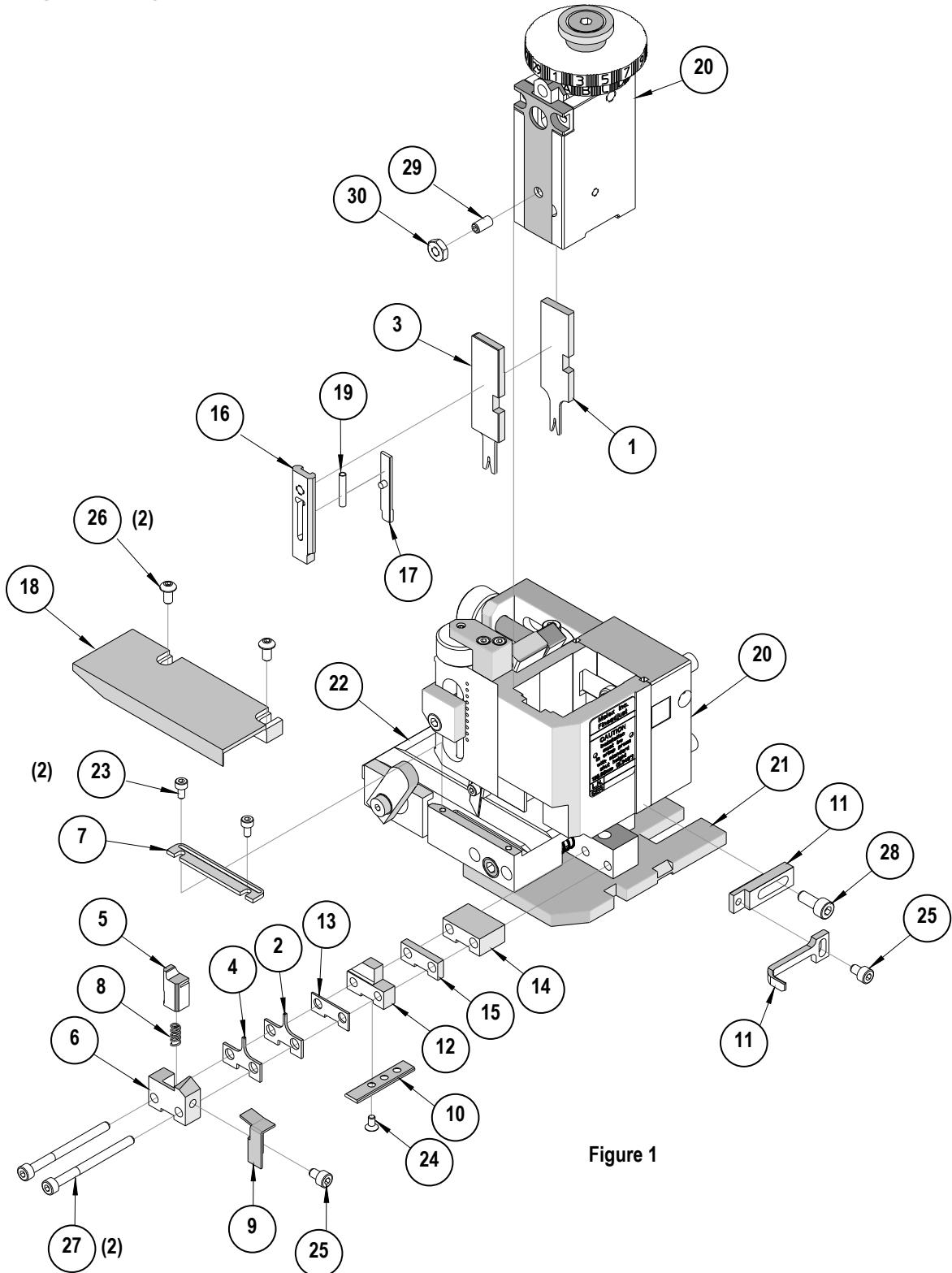


Figure 1

## 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 135.8mm (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>